

State of California
The Resources Agency

DEPARTMENT OF WATER RESOURCES
Division of Operations and Maintenance

STATE WATER PROJECT OPERATIONS DATA

For the month of:
November
2009

Edmund G. Brown Jr.
Governor
State of California

John Laird
Secretary for Resources
The Resources Agency

Mark Cowin
Director
Department of Water Resources

This monthly report of operational data for the State Water Project has been published since January 1965. Monthly SWP Operations Data Reports from January 1990 have been made available on the Internet at <http://www.water.ca.gov/swp/operationscontrol/projectwide.cfm>. It provides the State Water Service Contractors, public agencies, consultants and others with the daily and monthly status of the Project's water and power operations.

Revisions to these data will appear in the Annual Report of Operations reflecting corrections made after the monthly summaries have been printed.

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Department of Water Resources
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The organization shown above represents staff and positions relevant to this report as of publication date on May 2012. It is the Department's policy to not show staff in "Acting" or "Temporary" positions.

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MONTHLY HIGHLIGHTS

The following activities highlight actions that affected State Water Project operations during November 2009.

Statewide precipitation was about 75 percent of average for the water-year through November 30.

Precipitation percentages are used in this report to express historical and regional comparisons.

Additional and more specific information is available on the internet at

http://cdec.water.ca.gov/snow_rain.html

Snowpack and Statewide Runoff data is compiled four times annually, for the months of January, February, March, and April by the California Department of Water Resources in Bulletin 120. No Snowpack or Statewide Runoff data is available in November. Cumulative Unimpaired runoff for the 2009-10 water year for the Sacramento River Region was 0.9 maf, 66 percent of average, compared to 0.9 maf at this time in 2008.

Statewide reservoir storage was 75 percent of average to date. Total storage in major SWP reservoirs at the end of November 2009 was about 1.85 maf compared to 1.77 maf at this time in 2008. On November 30, 2009, end-of-month storage at Lake Oroville was about 1.14 maf, as compared to .999 maf at this time in 2008. The State share of San Luis Reservoir's end-of-month storage was about 188 taf, as compared with 225 taf at this time in 2008. The combined storage in SWP's southern reservoirs was about 524 taf, compared with about 544 taf at this time in 2008.

SWP water deliveries to date through November 2009 were about 2.38 maf. Water deliveries are a combination of project, transfer, and exchange classifications. Total deliveries through this same period in 2008 were 2.73 maf.

On May 31, by mutual agreement between the United States Bureau of Reclamation and the California Department of Water Resources in accordance with Article 6(h) of the COA, "Balanced" conditions were declared in the Delta and remained "Balanced" throughout the end of calendar year 2009. "Balanced" conditions exist when the DWR and the USBR agree that releases from upstream reservoirs plus unregulated flow approximately equal the water supply needed to meet Sacramento Valley in-basin uses, plus exports.

Feather River Outlet gate inspections continued into November as flows remained below 2,000 af for the first five days of the month. On November 28, Pool 28 elevation limitations were placed for installation of new pumps to allow Central Valley canal water into the California Aqueduct.

Table 1. Antelope Lake

Daily Operation

(in acre-feet except as noted)

Capacity: 22,566 ac-ft

November 2009

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs						Computed Inflow (cfs)	
				Regulated Release			Spill	Estimated Evaporation And Seepage	Total Outflow		
				Stream-flow Maint.	Water Supply Contract	Water Right					
Oct 31	4994.79	16,421									
1	4994.74	16,383	-38	20	0	0	0	3	23	4	
2	4994.69	16,344	-39	13	0	0	0	3	16	-4	
3	4994.69	16,344	0	5	0	0	0	2	7	7	
4	4994.69	16,344	0	5	0	0	0	2	7	7	
5	4994.68	16,336	-8	5	0	0	0	2	7	3	
6	4994.67	16,329	-7	15	0	0	0	2	17	13	
7	4994.63	16,298	-31	20	0	0	0	2	22	6	
8	4994.57	16,252	-46	20	0	0	0	2	22	-1	
9	4994.53	16,221	-31	20	0	0	0	2	22	6	
10	4994.48	16,183	-38	20	0	0	0	2	22	3	
11	4994.44	16,152	-31	20	0	0	0	2	22	6	
12	4994.43	16,145	-7	20	0	0	0	2	22	18	
13	4994.37	16,099	-46	20	0	0	0	2	22	-1	
14	4994.32	16,061	-38	20	0	0	0	2	22	3	
15	4994.27	16,023	-38	20	0	0	0	2	22	3	
16	4994.22	15,985	-38	20	0	0	0	2	22	3	
17	4994.17	15,947	-38	20	0	0	0	2	22	3	
18	4994.13	15,916	-31	20	0	0	0	2	22	6	
19	4994.09	15,886	-30	20	0	0	0	2	22	7	
20	4994.07	15,871	-15	20	0	0	0	2	22	14	
21	4994.05	15,856	-15	20	0	0	0	2	22	14	
22	4994.01	15,825	-31	20	0	0	0	2	22	6	
23	4994.01	15,825	0	20	0	0	0	2	22	22	
24	4993.97	15,795	-30	20	0	0	0	2	22	7	
25	4993.93	15,765	-30	20	0	0	0	2	22	7	
26	4993.89	15,735	-30	20	0	0	0	2	22	7	
27	4993.85	15,705	-30	20	0	0	0	2	22	7	
28	4993.83	15,690	-15	20	0	0	0	2	22	14	
29	4993.79	15,660	-30	20	0	0	0	2	22	7	
30	4993.75	15,630	-30	20	0	0	0	2	22	7	
Total cfs-days				---	543	0	0	0	62	605	
Total ac-ft				-791	1,077	0	0	0	122	1,199	
										408	

Table 2. Frenchman Lake

Daily Operation
(in acre-feet except as noted)

Capacity: 55,477 ac-ft

November 2009

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs						Computed Inflow (cfs)	
				Regulated Release			Spill	Estimated Evaporation And Seepage	Total Outflow		
				Stream-flow Maint.	1/ Water Supply Contract	Water Right					
Oct 31	5559.00	20,601									
1	5559.00	20,601	0	2	0	0	0	3	5	5	
2	5559.00	20,601	0	2	1	0	0	3	6	6	
3	5558.99	20,593	-8	2	2	0	0	3	7	3	
4	5558.98	20,584	-9	2	2	0	0	3	7	2	
5	5558.92	20,533	-51	2	2	0	0	3	7	-19	
6	5558.87	20,490	-43	2	2	0	0	3	7	-15	
7	5558.86	20,481	-9	2	2	0	0	3	7	2	
8	5558.85	20,473	-8	2	2	0	0	3	7	3	
9	5558.84	20,464	-9	2	2	0	0	3	7	2	
10	5558.82	20,447	-17	2	2	0	0	2	6	-3	
11	5558.78	20,413	-34	2	2	0	0	2	6	-11	
12	5558.79	20,421	8	2	2	0	0	2	6	10	
13	5558.79	20,421	0	2	2	0	0	2	6	6	
14	5558.78	20,413	-8	2	2	0	0	2	6	2	
15	5558.77	20,404	-9	2	2	0	0	2	6	1	
16	5558.75	20,387	-17	2	2	0	0	2	6	-3	
17	5558.73	20,370	-17	2	2	0	0	2	6	-3	
18	5558.72	20,362	-8	2	2	0	0	2	6	2	
19	5558.72	20,362	0	2	2	0	0	2	6	6	
20	5558.73	20,370	8	2	2	0	0	2	6	10	
21	5558.76	20,396	26	2	2	0	0	2	6	19	
22	5558.72	20,362	-34	2	2	0	0	2	6	-11	
23	5558.72	20,362	0	2	2	0	0	2	6	6	
24	5558.70	20,345	-17	2	2	0	0	2	6	-3	
25	5558.67	20,319	-26	2	2	0	0	2	6	-7	
26	5558.66	20,311	-8	2	2	0	0	2	6	2	
27	5558.64	20,294	-17	2	2	0	0	2	6	-3	
28	5558.74	20,379	85	2	2	0	0	2	6	49	
29	5558.63	20,285	-94	2	2	0	0	2	6	-41	
30	5558.61	20,268	-17	2	2	0	0	2	6	-3	
Total cfs-days				---	60	57	0	0	69	186	
Total ac-ft				-333	119	113	0	0	137	369	

1/ Last Chance Creek Water District.

Table 3. Lake Davis

Daily Operation

(in acre-feet except as noted)

Capacity: 84,371 ac-ft

November 2009

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs					Computed Inflow (cfs)	
				Regulated Release			Spill	Estimated Evaporation And Seepage		
				Stream-flow Maint.	Water Right 1/	Water Supply Contract				
Oct 31	5762.20	41,340								
1	5762.20	41,340	0	10	0.2	0	0	7	17	
2	5762.19	41,313	-27	10	0.2	0	0	7	17	
3	5762.18	41,287	-26	10	0.2	0	0	7	17	
4	5762.14	41,179	-108	10	0.2	0	0	7	17	
5	5762.10	41,072	-107	10	0.2	0	0	7	17	
6	5762.12	41,125	53	10	0.2	0	0	7	17	
7	5762.13	41,152	27	10	0.2	0	0	7	17	
8	5762.13	41,152	0	10	0.2	0	0	7	17	
9	5762.10	41,072	-80	10	0.2	0	0	7	17	
10	5762.09	41,045	-27	10	0.2	0	0	7	17	
11	5762.08	41,018	-27	10	0.2	0	0	7	17	
12	5762.08	41,018	0	10	0.2	0	0	7	17	
13	5762.08	41,018	0	10	0.2	0	0	7	17	
14	5762.06	40,965	-53	10	0.2	0	0	7	17	
15	5762.06	40,965	0	10	0.2	0	0	7	17	
16	5762.03	40,884	-81	10	0.2	0	0	7	17	
17	5762.01	40,831	-53	10	0.2	0	0	7	17	
18	5762.00	40,804	-27	10	0.2	0	0	7	17	
19	5762.00	40,804	0	10	0.2	0	0	7	17	
20	5762.00	40,804	0	10	0.2	0	0	7	17	
21	5762.04	40,911	107	10	0.2	0	0	7	17	
22	5762.04	40,911	0	10	0.2	0	0	7	17	
23	5762.04	40,911	0	10	0.2	0	0	7	17	
24	5762.02	40,858	-53	10	0.2	0	0	7	17	
25	5762.01	40,831	-27	10	0.2	0	0	8	18	
26	5762.00	40,804	-27	10	0.2	0	0	8	18	
27	5762.00	40,804	0	10	0.2	0	0	8	18	
28	5762.14	41,179	375	10	0.2	0	0	8	18	
29	5762.10	41,072	-107	10	0.2	0	0	8	18	
30	5762.07	40,991	-81	10	0.2	0	0	8	18	
Total cfs-days				---	294	6	0	216	516	
Total ac-ft				-349	583	12	0	429	1,024	
									675	

1/ Includes unclassified non-project diversions to local agencies (Valberti and Romelli).

Table 4. Lake Oroville

Daily Operation

(in acre-feet except as noted)

Capacity: 3,537, 580 ac-ft

November 2009

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow							Inflow	
				Hyatt Powerplant Generation 1/	Palermo Canal 2/	Lime Saddle Marina	Butte County Del Oro	Evaporation 3/	Spill	Total Outflow	Hyatt Powerplant Pumpback	Computed Inflow 4/
Oct 31	704.64	1,290,390										
	1	704.44	1,288,835	-1,555	7,387	6	0	0	45	0	7,438	0
	2	703.93	1,284,875	-3,960	7,160	6	0	0	58	0	7,224	0
	3	703.82	1,284,022	-853	7,372	6	0	0	69	0	7,447	0
	4	703.32	1,280,149	-3,873	6,919	6	0	0	75	0	7,000	0
	5	703.24	1,279,530	-619	6,999	6	0	0	51	0	7,056	0
	6	702.75	1,275,743	-3,787	7,439	6	0	0	46	0	7,491	0
	7	701.96	1,269,654	-6,089	8,919	6	0	0	23	0	8,948	0
	8	701.27	1,264,352	-5,302	9,760	6	0	0	68	0	9,834	0
	9	700.67	1,259,753	-4,599	9,499	6	0	0	51	0	9,556	0
	10	699.91	1,253,950	-5,803	9,001	5	0	0	34	0	9,040	0
	11	698.98	1,246,865	-7,085	8,563	4	0	0	40	0	8,607	0
	12	698.16	1,240,641	-6,224	8,543	4	0	0	6	0	8,553	0
	13	697.34	1,234,440	-6,201	8,130	4	0	0	36	0	8,170	0
	14	696.47	1,227,885	-6,555	8,125	4	0	0	22	0	8,151	0
	15	695.76	1,222,554	-5,331	7,847	4	0	0	78	0	7,929	0
	16	694.69	1,214,551	-8,003	8,190	4	0	0	39	0	8,233	0
	17	693.80	1,207,923	-6,628	8,225	4	0	0	28	0	8,257	0
	18	693.03	1,202,210	-5,713	8,569	4	0	0	39	0	8,612	0
	19	692.14	1,195,630	-6,580	8,296	4	0	0	33	0	8,333	0
	20	691.34	1,189,738	-5,892	8,968	4	0	0	27	0	8,999	0
	21	690.33	1,182,328	-7,410	9,256	4	0	0	0	0	9,260	0
	22	689.31	1,174,878	-7,450	9,807	4	0	0	49	0	9,860	0
	23	688.29	1,167,462	-7,416	9,413	4	0	0	11	0	9,428	0
	24	687.40	1,161,018	-6,444	8,503	4	0	0	59	0	8,566	0
	25	685.94	1,150,501	-10,517	13,354	4	0	0	16	0	13,374	0
	26	686.05	1,151,291	790	2,546	4	0	0	27	0	2,577	0
	27	685.71	1,148,850	-2,441	4,431	4	0	0	16	0	4,451	0
	28	685.42	1,146,772	-2,078	4,144	4	0	1	27	0	4,176	0
	29	685.08	1,144,339	-2,433	4,231	4	0	1	101	0	4,337	0
	30	684.12	1,137,487	-6,852	10,567	4	0	0	101	0	10,672	0
Total				-152,903	240,163	139	0	2	1,275	0	241,579	0
88,676												

1/ Includes bypass flows

2/ South Feather Water and Power Agency

3/ Evaporation will be zero for days when there is precipitation or heavy overcast.

4/ Does not include pumpback.

**Table 5. Thermalito Forebay
Including Diversion Pool and Power Canal**

Daily Operation

(in acre-feet except as noted)

November 2009

Capacity: 25,120 ac-ft

Date	Storage 1/	Storage Change	Inflow			Outflow					Losses (-) And Gains (+)
			Lake Oroville Releases 2/	Kelly Ridge Generation	Thermalito Pumping- Generating Plant Pumpback	Thermalito Pumping- Generating Plant Generation 3/	Butte County Cal Water	Thermalito Irrigation District	Releases To River 4/	Hyatt Powerplant Pumpback	
Oct 31	23,795										
1	24,307	512	7,387	483	0	5,216	2	3	2,243	0	106
2	23,965	-342	7,160	425	0	4,784	2	3	3,334	0	196
3	23,689	-276	7,372	462	0	4,136	2	3	4,187	0	218
4	23,812	123	6,919	462	0	4,081	2	3	3,751	0	579
5	23,440	-372	6,999	463	0	5,253	2	3	2,777	0	201
6	23,956	516	7,439	463	0	6,102	2	3	1,652	0	373
7	23,993	37	8,919	462	0	8,606	2	3	1,295	0	562
8	23,700	-293	9,760	462	0	9,566	3	3	1,295	0	352
9	24,265	565	9,499	461	0	8,648	3	3	1,301	0	560
10	24,286	21	9,001	462	0	8,716	3	3	1,295	0	575
11	24,334	48	8,563	462	0	8,240	3	3	1,295	0	564
12	24,261	-73	8,543	483	0	8,288	3	3	1,297	0	492
13	24,140	-121	8,130	512	0	7,980	3	3	1,301	0	524
14	24,006	-134	8,125	476	0	7,940	3	3	1,303	0	514
15	24,043	37	7,847	498	0	7,912	3	3	1,303	0	913
16	24,006	-37	8,190	472	0	7,868	3	4	1,303	0	479
17	24,146	140	8,225	514	0	7,868	3	4	1,301	0	577
18	24,211	65	8,569	507	0	7,868	3	4	1,303	0	167
19	24,031	-180	8,296	496	0	8,160	3	4	1,307	0	502
20	24,312	281	8,968	500	0	8,412	3	4	1,305	0	537
21	24,177	-135	9,256	500	0	9,060	3	4	1,305	0	481
22	24,193	16	9,807	500	0	9,492	3	4	1,305	0	513
23	24,472	279	9,413	500	0	8,988	3	4	1,305	0	666
24	24,308	-164	8,503	481	0	8,228	3	4	1,297	0	384
25	23,690	-618	13,354	497	0	13,336	3	4	1,303	0	177
26	24,450	760	2,546	509	0	1,736	3	4	1,315	0	763
27	24,773	323	4,431	503	0	3,696	3	4	1,305	0	397
28	23,792	-981	4,144	503	0	4,178	3	4	1,301	0	-142
29	24,209	417	4,231	489	0	2,905	3	4	1,305	0	-86
30	24,162	-47	10,567	486	0	10,356	3	4	1,305	0	568
Total		367	240,163	14,493	0	217,619	83	105	49,194	0	12,712

1/ Sum of Thermalito Forebay and Diversion Pool.

2/ Sum of releases from Lake Oroville through Hyatt plant, and spill.

3/ Includes Bypass flows at Thermalito.

4/ The sum of the flows from fish barrier dam and the fish hatchery.

Table 6. Thermalito Afterbay

Daily Operation

(in acre-feet except as noted)

Capacity: 57,040 ac-ft

November 2009

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow					Losses (-) and Gains (+)	Total Releases to River 2/
				Thermalito Pumping-Generating Plant Generation 1/	Sutter Butte Canal	Western Canal Lateral	Richvale Canal	Western Canal	Afterbay River Outlet	Thermalito Pumping-Generating Plant Pumpback		
Oct 31	128.85	28,437										
1	128.50	27,349	-1,088	5,216	1,287	16	621	1,880	1,500	0	-1,000	3,743
2	128.40	27,042	-307	4,784	1,349	16	768	1,934	805	0	-219	4,139
3	128.08	26,071	-971	4,136	2,043	16	801	1,972	18	0	-257	4,205
4	127.51	24,383	-1,688	4,081	2,281	16	780	2,003	359	0	-330	4,110
5	127.01	22,946	-1,437	5,253	2,321	15	758	1,984	1,367	0	-245	4,144
6	126.29	20,951	-1,995	6,102	2,380	15	744	1,906	2,440	0	-612	4,092
7	126.33	21,060	109	8,606	2,420	16	740	1,793	2,757	0	-771	4,052
8	126.63	21,882	822	9,566	2,440	16	740	1,771	2,777	0	-1,000	4,072
9	126.69	22,049	167	8,648	2,341	16	807	1,773	2,777	0	-767	4,078
10	126.81	22,383	334	8,716	2,202	16	869	1,745	2,777	0	-773	4,072
11	126.78	22,299	-84	8,240	2,182	16	893	1,712	2,757	0	-764	4,052
12	126.88	22,579	280	8,288	2,142	16	839	1,702	2,579	0	-730	3,876
13	127.08	23,145	566	7,980	2,083	10	781	1,619	2,182	0	-739	3,483
14	127.39	24,034	889	7,940	2,063	6	772	1,543	1,956	0	-711	3,259
15	127.68	24,880	846	7,912	2,083	6	770	1,543	1,960	0	-704	3,263
16	127.95	25,681	801	7,868	2,060	8	772	1,519	2,063	0	-645	3,366
17	128.09	26,101	420	7,868	2,180	10	730	1,448	2,519	0	-561	3,820
18	128.11	26,161	60	7,868	2,220	10	712	1,363	2,777	0	-726	4,080
19	128.33	26,828	667	8,160	2,241	10	647	1,180	2,777	0	-638	4,084
20	128.75	28,124	1,296	8,412	2,202	10	569	944	2,777	0	-614	4,082
21	129.38	30,122	1,998	9,060	2,182	10	553	869	2,777	0	-671	4,082
22	130.04	32,285	2,163	9,492	2,182	10	551	871	2,777	0	-938	4,082
23	130.58	34,106	1,821	8,988	2,182	10	541	789	2,757	0	-888	4,062
24	131.00	35,556	1,450	8,228	2,142	13	534	720	2,777	0	-592	4,074
25	132.78	42,010	6,454	13,336	2,142	17	534	720	2,757	0	-712	4,060
26	131.34	36,750	-5,260	1,736	2,162	18	532	688	2,757	0	-839	4,072
27	130.51	33,867	-2,883	3,696	2,162	18	532	690	2,757	0	-420	4,062
28	129.85	31,655	-2,212	4,178	2,162	18	532	688	2,757	0	-233	4,058
29	128.72	28,031	-3,624	2,905	2,162	17	532	678	2,777	0	-363	4,082
30	129.82	31,556	3,525	10,356	2,122	12	534	670	2,777	0	-716	4,082
Total		3,119		217,619	64,120	403	20,488	40,717	69,594	0	-19,178	118,788

1/ Includes Bypass flows at Thermalito.

2/ The sum of the flows from the fish barrier dam, fish hatchery, and afterbay river outlet.

Table 7. Oroville-Thermalito Complex

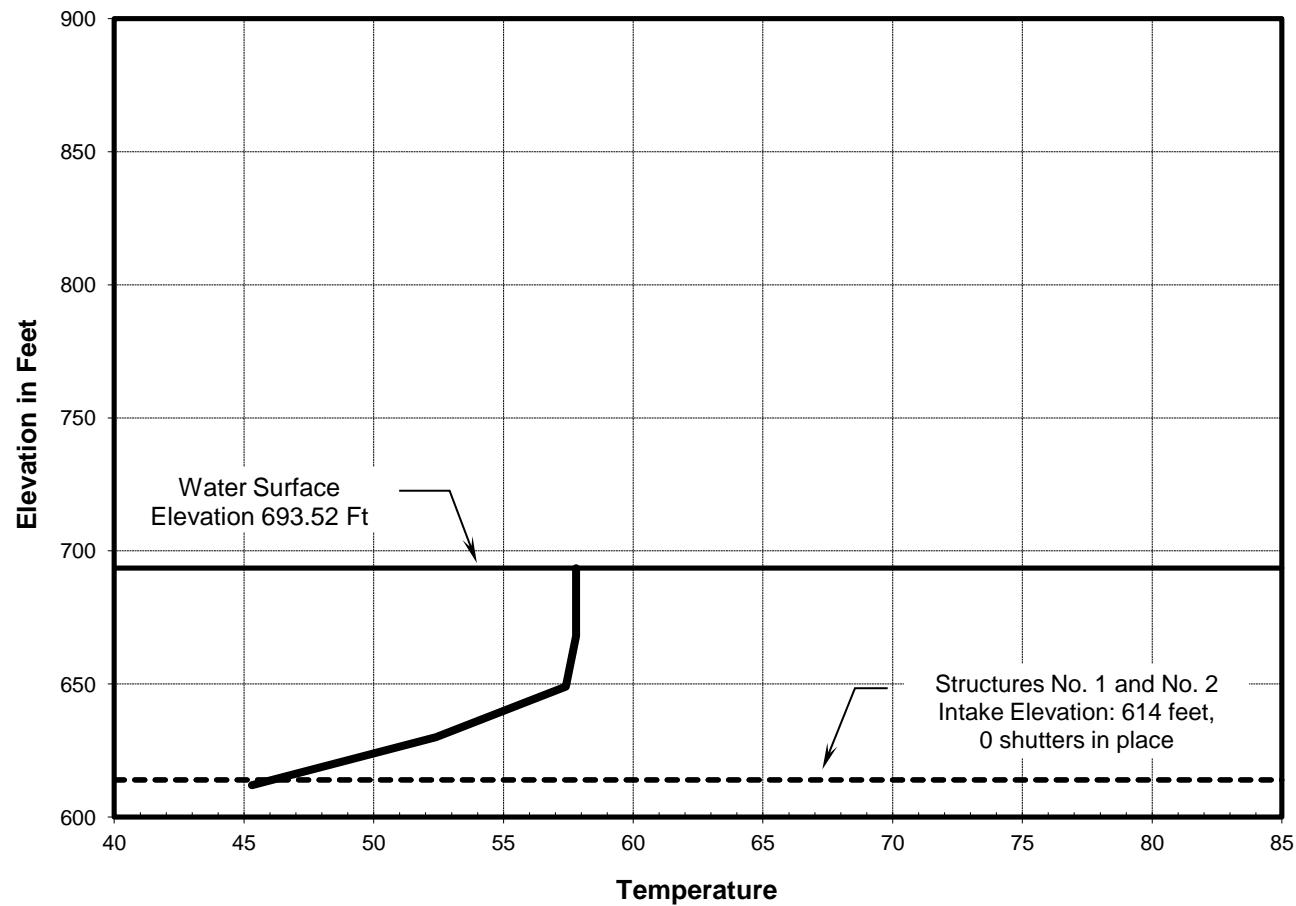
Water Temperature Data

(in degrees Fahrenheit)

November 2009

Date	Mean Daily Temperature	
	Thermalito Afterbay Outlet	Fish Hatchery
1	55	54.1
2	55	54.4
3	56	54.5
4	56	54.6
5	56	54.6
6	57	54.4
7	57	54.6
8	55	55.1
9	54	55.3
10	54	55.6
11	54	55.3
12	54	55.3
13	53	55.1
14	53	55
15	52	55
16	52	55.2
17	52	54.9
18	52	55
19	52	54.6
20	51	54.5
21	51	53.6
22	50	54.1
23	50	54.2
24	50	54.6
25	51	54.2
26	51	53.9
27	50	53.9
28	49	53.5
29	49	53
30	49	53.3

**Lake Oroville Temperature Profile
on November 18, 2009**



Note: Water surface elevations on Table 4 are taken at Oroville Dam at midnight and may differ slightly from those shown on this table which are normally taken at mid-day and upstream from Oroville Dam.

Table 8. North Bay Aqueduct
Delta Field Division, Monthly Deliveries

(In acre-feet)

November 2009

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
	Beginning and Ending		Structure			Table A	Permit	Article 56C	Settlement	Other	
	No.	Structure	Mile								
1	1	Barker Slough Pumping Plant	0.17	(Into the North Bay Aqueduct)	4,305	123	123	416	1,057		
		Travis Surge Tank	8.78								
			8.80	Solano County Water Agency Travis AFB	123						
			10.54	Solano County Water Agency Fairfield / Vacaville 24"	416						
				Solano County Water Agency Fairfield / Vacaville 42"	1,057						
	2		17.00	Solano County Water Agency Central Solano	Stub	1/ 121	1148	845			
	3A	Cordelia Forebay	21.23								
		Cordelia Pumping Plant & Cordelia Spillway	21.30		2,635						
		Napa Pipeline	21.33	Solano County Water Agency Vallejo	1,269						
				Solano County Water Agency Benicia	845						
3B	2	Cordelia Surge Tank	23.33			200	320	1			
		Creston Surge Tank Connection	25.65								
			26.95	Napa County Flood Control & WCD American Canyon 2	200						
			27.27	Napa County Flood Control & WCD American Canyon 3	0						
		Napa Terminal Tank	27.58	City of Napa	320						
			27.60	Napa County Flood Control & WCD American Canyon 1	1						

1/ Includes 1 AF of Napa Co. FC&WCD Table A through Solano Co.'s turnout (Reach 3A) for delivery to American Canyon.

Table 9. Delta Field Division Plant Data

(in acre-feet)

November 2009

Date	North Bay Aqueduct		California Aqueduct		South Bay Aqueduct			
	Barker Slough Pumping Plant	Cordelia Pumping Plant	Banks Pumping Plant		South Bay Pumping Plant	Del Valle Pumping Plant		
			Total	SWP		Into Lake	Into Aqueduct	Gravity Flow Through Plant Into Aqueduct
1	140	75	6,653	6,653	510	0	0	0
2	160	87	1,796	1,796	469	0	0	0
3	175	87	1,722	1,722	435	0	0	0
4	169	88	1,743	1,743	434	0	0	0
5	150	87	1,675	1,675	458	0	0	0
6	147	81	0	0	499	0	0	0
7	141	73	1,756	1,756	492	0	0	0
8	123	70	1,736	1,736	490	0	0	0
9	137	70	1,750	1,750	442	0	0	0
10	153	75	1,745	1,745	465	0	0	0
11	156	89	1,746	1,746	460	0	0	0
12	161	90	1,750	1,750	466	0	0	0
13	137	75	2,127	2,127	420	0	0	0
14	138	72	2,145	2,145	344	0	0	40
15	128	72	1,991	1,991	250	0	0	76
16	117	71	2,400	2,400	150	0	0	106
17	135	77	2,148	2,148	13	0	0	211
18	149	82	2,145	2,145	0	0	0	249
19	146	86	2,149	2,149	0	0	0	249
20	141	103	2,139	2,139	0	0	0	248
21	122	96	2,149	2,149	0	0	0	226
22	118	96	2,141	2,141	0	0	0	217
23	127	96	2,068	2,068	0	0	0	229
24	133	101	3,794	3,794	0	0	0	231
25	132	100	6,753	6,753	4	0	0	241
26	149	95	6,716	6,716	0	0	0	249
27	161	107	5,792	5,792	0	0	0	245
28	156	104	5,719	5,719	0	0	0	245
29	159	117	6,926	6,926	0	0	0	258
30	145	113	6,224	6,224	0	0	0	251
Total	4,305	2,635	89,598	89,598	6,801	0	0	3,571

Table 10. Clifton Court Forebay

Daily Operation of Gates

November 2009

Date	Time								Amount of inflow in Acre-Feet
	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed	
1	2:00	5:57							1,965
2	2:30	8:06							1,967
3	3:15	5:06	12:17	13:48					1,968
4	0:01	1:00	4:00	5:15					1,968
5	0:01	1:45	11:30	14:14					1,975
6	0:01	2:30	12:30	15:15					1,977
7	0:01	3:15	12:30	15:45					1,971
8	0:01	4:15	14:30	16:05					1,973
9	0:45	4:35	15:15	16:40					2,332
10	2:00	5:55	16:15	19:04					1,917
11	4:45	6:10	16:45	19:51					1,817
12	4:45	6:43	17:30	18:50					1,965
13	6:00	7:40	18:24	19:25					1,964
14	6:50	9:05	18:45	21:20					1,973
15	8:15	11:30	19:15	21:45					1,969
16	9:00	11:05	20:00	22:35					1,971
17	10:00	13:00							1,962
18	0:01	1:00	11:00	13:45	21:00	22:18			1,973
19	0:01	1:00	11:30	14:15					1,977
20	0:01	1:30	12:15	14:40					1,967
21	0:01	2:30							1,976
22	0:01	1:55	8:10	11:37					1,969
23	0:01	3:50	9:30	11:50					1,974
24	0:01	1:24	8:45	15:00	21:50	22:40			3,914
25	0:10	4:30	9:15	16:42					7,915
26	1:15	3:07	10:00	15:55					6,931
27	1:10	4:00	9:01	11:45	15:00	18:49			5,921
28	2:07	6:25	11:00	12:30	15:30	17:25			5,936
29	2:15	5:23	5:55	8:12	10:59	13:15			6,926
30	3:00	4:02	11:30	14:00	16:45	19:30			6,938
Total inflow for the month in AF:									89,951

Table 11. Governor Edmund G. Brown California Aqueduct

Delta Field Division, Monthly Deliveries

(In acre-feet)

November 2009

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
	Beginning and Ending		No.			Table A	USBR	General Conveyance	Drought Water Bank	Local Other	
	No.	Structure	Mile								
1A			1.83	Byron-Bethany I.D.	310					310	
1	1	Banks Pumping Plant	3.32		89,598	39	39	62	7		
		South Bay Pumping Plant	4.49	Bethany Reservoir (Into the South Bay Aquaduct)	6,801						
		Check No. 1	5.95								
			8.08	Alameda Co. Zone 7 WA Mountain House Golf Course	0						
	2	Check No. 2	12.01								
			12.47	Musco Olive	39						
		Check No. 3	18.29								
	3		22.16	Tracy Golf & Country Club	0						
		Check No. 4	23.99								
2A	4	Check No. 5	29.73								
	5	Check No. 6	34.24								
	6		35.22	Turlock Fruit Company Inflow	0						
		Check No. 7	39.91								
	7		42.46	Oak Flat Water District-A	0						
			42.9	Western Hills WD	62						
			43.81	Oak Flat Water District-B	7						
			44.64	Oak Flat Water District-C	0						
		Check No. 8	45.97								
	8		46.18	Oak Flat Water District-D	44						
				Oak Flat Totals:	51						
2B	9	Check No. 9	51.3								
	10	Check No. 10	56.86								
	11	Check No. 11	61.4								
	12		66.14	Veteran's Cemetery	8						
		Check No. 12	66.71		82,641						

Table 12. South Bay Aqueduct
Delta Field Division, Monthly Deliveries

(In acre-feet)

November 2009

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A	Local	Article 56C	Semitropic Bank Recovery	Recreation		
	No.	Structure	Mile									
1	1	South Bay Pumping Plant	0.00	(into South Bay Aqueduct)	6,801	8	379	20	6	2		
			3.17	Granite - Vasco Rd. (Temp.)	0							
			3.18	Oakland Scavenger Zone 7	8							
	2	Check No. 1	3.91									
		Check No. 2	5.21									
	3		7.21	Zone 7 Water Agency Altamont	0							
		Check No. 3	9.49	Zone 7 Water Agency Patterson								
				Storage Exchange Project Water	0							
	4	Check No. 4	10.68									
	5	Check No. 5	12.29									
4	6		13.55	Zone 7 Water Agency Wente #1	20	273	20	15	182	2		
			14.16	Zone 7 Water Agency Wente #2	6							
			14.31	Zone 7 Water Agency Ising	0							
		Check No. 6	14.65									
	7		14.78	Zone 7 Water Agency Arroyo Mocho Project Water	273							
		Check No. 7	16.38									
	8		16.57	Zone 7 Water Agency Wente #3	0							
			16.63	Zone 7 Water Agency Wente #4	20							
			16.69	Zone 7 Water Agency Norman Nursery	0							
			16.70	Zone 7 Water Agency Concannon Project Water	15							
		Del Valle Branch Pipeline Junction	18.63	Pumped into Lake Del Valle	0							
5	8			Pumped into South Bay Aqueduct	0							
				Gravity into South Bay Aqueduct	3,571							
		Deliveries through Del Valle Branch Pipeline		Zone 7 Water Agency Arroyo Valle #1 & #2 Project Water	78	78	38	16	110	286		
				Storage Exchange	38							
				Inflow Release	182							
				East Bay Regional Park Dist.								
				Del Valle Recreation	2							
6				Zone 7 Water Agency Wente #5	16	1,365	182	808	114	4,944		
7		La Costa Tunnel	19.20	Zone 7 Water Agency So. Livermore Project Storage Exchange Project Water	0	1,700	110	114	114	4,944		
			19.21	Zone 7 - Kalthrof Detjens	110							
8		Mission Tunnel	22.50	ACWD - Vallecitos Project Water	808	1,700	110	114	114	4,944		
			25.97	City of San Francisco San Antonio	0							
9		Santa Clara Pipeline	28.97	ACWD - Bayside 1 & 2 Project Water Storage Exchange	1,814	1,700	110	114	114	4,944		
			35.86	S.C.V.W.D. Meter	13							

Table 13. Lake Del Valle

Daily Operation

Capacity: 77,106 ac-ft

November 2009

Date	Water Surface Elevation (feet)	Storage	Storage Change	Inflow		Outflow					Precipitation (inches)
				Natural 1/	From South Bay Aqueduct	Arroyo Valle	South Bay Aqueduct 2/	Recreation Deliveries 3/	Evaporation	Total Outflow	
Oct 31	697.97	36,454									
1	697.97	36,454	0	6	0	0	0	1	5	6	0.00
2	697.95	36,440	-13	-5	0	0	0	1	8	9	0.00
3	697.94	36,434	-7	1	0	0	0	0	7	7	0.00
4	697.94	36,434	0	6	0	0	0	0	6	6	0.00
5	697.94	36,434	0	5	0	0	0	0	5	5	0.00
6	697.91	36,414	-20	-17	0	0	0	0	3	3	0.00
7	697.91	36,414	0	5	0	0	0	0	5	5	0.00
8	697.90	36,407	-7	-1	0	0	0	0	5	5	0.00
9	697.87	36,387	-20	-15	0	0	0	0	5	5	0.00
10	697.87	36,387	0	4	0	0	0	0	4	4	0.00
11	697.87	36,387	0	3	0	0	0	0	3	3	0.00
12	697.86	36,380	-7	1	0	0	0	0	7	7	0.00
13	697.80	36,340	-40	-40	0	0	0	0	0	0	0.00
14	697.79	36,334	-7	37	0	0	40	0	4	44	0.01
15	697.61	36,214	-120	-40	0	0	76	0	4	80	0.00
16	697.44	36,100	-113	1	0	0	106	0	8	114	0.00
17	697.13	35,895	-206	10	0	0	211	0	5	216	0.00
18	696.78	35,663	-232	21	0	0	249	0	4	253	0.00
19	696.41	35,419	-244	10	0	0	249	0	4	253	0.00
20	696.03	35,170	-249	4	0	0	248	0	5	253	0.00
21	695.73	34,974	-196	31	0	0	226	0	1	227	0.07
22	695.39	34,754	-220	1	0	0	217	0	4	221	0.02
23	695.03	34,521	-232	1	0	0	229	0	4	233	0.00
24	694.70	34,309	-212	25	0	0	231	0	6	237	0.00
25	694.35	34,085	-224	24	0	0	241	0	7	248	0.00
26	693.99	33,856	-229	22	0	0	249	0	2	251	0.00
27	693.63	33,627	-228	22	0	0	245	0	5	250	0.01
28	693.27	33,400	-227	18	0	0	245	0	0	245	0.07
29	692.88	33,155	-245	22	0	0	258	0	10	268	0.00
30	692.50	32,917	-238	20	0	0	251	0	6	257	0.00
Total				-3,537	182	0	0	3,571	2	146	3,719
1/ Total inflow from stream gaging station above Lang Canyon and accretions/depletions.											
2/ Project water released to South Bay Aqueduct through Del Valle Pumping Plant.											
3/ To East Bay Regional Park District.											
NR=No Records											

Table 14. Consolidated State-Federal O'Neill Forebay

Daily Operations

November 2009

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Capacity 56,430 ac-ft

Date	Water Surface Elevation (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)				Outflow (cfs)				Computed Losses (-) Gains (+) (cfs)	
				Pump In 1/	O'Neill Pumping Generating Plant (Pumped)	Gianelli Pumping Generating Plant (Generation)	California Aqueduct	O'Neill Pumping Generating Plant (Generation)	Gianelli Pumping Generating Plant (Pumped)	Dos Amigos Pumping Plant	Deliveries 2/		
Oct 31	223.12	51,367											
1	221.38	46,758	-4,609	0	3,411	0	3,086	0	5,655	3,005	12	-149	
2	219.91	42,919	-3,839	2	3,118	0	963	0	4,515	1,457	12	-34	
3	218.33	38,895	-4,024	2	2,840	0	768	0	4,084	1,449	10	-96	
4	219.55	41,990	3,095	1	2,706	0	811	0	0	1,640	2	-316	
5	219.95	43,023	1,033	0	2,699	0	231	0	0	1,982	2	-425	
6	220.30	43,931	908	0	2,549	0	0	0	0	1,808	2	-281	
7	220.29	43,905	-26	0	2,499	0	441	0	0	2,648	2	-303	
8	220.62	44,766	861	0	2,608	0	659	0	0	2,478	2	-353	
9	221.51	47,099	2,333	0	2,670	0	552	0	0	1,639	2	-405	
10	222.88	50,726	3,627	0	2,582	0	555	0	0	985	2	-321	
11	223.35	51,982	1,256	0	2,494	0	568	0	0	2,091	2	-336	
12	222.96	50,939	-1,043	0	2,435	0	306	0	1,405	1,728	2	-132	
13	222.03	48,464	-2,475	0	2,490	0	1,305	0	2,793	1,976	2	-272	
14	223.01	51,073	2,609	0	2,769	0	1,186	0	928	1,424	2	-286	
15	222.44	49,554	-1,519	0	3,005	0	1,416	0	2,786	2,292	2	-107	
16	223.13	51,393	1,839	0	2,716	0	1,413	0	922	1,994	2	-284	
17	223.47	52,303	910	0	2,532	0	1,164	0	1,275	1,656	2	-304	
18	223.05	51,180	-1,123	2	2,687	0	784	0	3,298	758	2	19	
19	222.32	49,235	-1,945	2	2,182	0	968	0	2,571	1,355	2	-205	
20	222.03	48,464	-771	3	1,685	0	968	0	1,353	1,601	2	-89	
21	221.67	47,519	-945	2	1,709	0	977	0	1,238	1,773	2	-151	
22	220.01	43,178	-4,341	3	1,705	0	948	0	2,663	2,274	2	94	
23	220.30	43,931	753	3	1,608	0	1,180	0	873	1,323	2	-213	
24	221.64	47,441	3,510	3	1,506	0	1,948	0	875	877	2	67	
25	222.70	50,246	2,805	3	1,807	0	2,869	0	2,680	721	4	140	
26	222.09	48,624	-1,622	3	1,971	0	3,777	0	5,962	783	3	179	
27	222.95	50,913	2,289	3	1,955	0	2,953	0	2,948	778	3	-28	
28	223.18	51,527	614	3	2,062	0	2,775	0	3,916	779	3	168	
29	221.81	47,887	-3,640	3	1,955	0	3,048	0	6,372	729	2	262	
30	223.43	52,196	4,309	0	1,802	0	2,918	0	1,875	826	2	155	
Total				829	38	70,757	0	41,537	0	60,987	46,829	93	-4,005
Mean cfs				---	1	2,359	0	1,385	0	2,033	1,561	3	-134
Acre-feet				829	76	140,629	0	82,641	0	121,434	93,134	184	-7,765

1/ Pump-in located at Mile 79.67R.

2/ Includes 82 AF delivered to DFG at O'Neill Forebay, 2 AF to Parks & Rec., 1 AF to Cattle Program, 24 AF to San Luis Water District, and 75 AF Pump-In Credit.

Table 15. Consolidated State-Federal San Luis Reservoir

Daily Operations

November 2009

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Capacity: 2,027,835 ac-ft

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)		Outflow (cfs)			Computed Losses (-) Gains (+) (cfs)
				Gianelli Pumping Generating Plant (Pumped)	Gianelli Pumping Generating Plant (Generation)	Pacheco Tunnel 1/	Parks and Rec. Del.		
Oct 31	397.38	502,230							
1	398.70	512,607	10,377	5,655	0	65	0	-358	
2	399.72	520,680	8,073	4,515	0	72	0	-373	
3	400.63	527,922	7,242	4,084	0	41	0	-392	
4	400.64	528,002	80	0	0	71	0	111	
5	400.64	528,002	0	0	0	34	0	34	
6	400.61	527,763	-239	0	0	24	0	-96	
7	400.58	527,523	-240	0	0	24	0	-97	
8	400.56	527,364	-159	0	0	25	0	-55	
9	400.53	527,125	-239	0	0	50	0	-70	
10	400.50	526,885	-240	0	0	60	0	-61	
11	400.47	526,646	-239	0	0	62	0	-58	
12	400.69	528,401	1,755	1,405	0	60	0	-460	
13	401.28	533,118	4,717	2,793	0	65	0	-350	
14	401.50	534,881	1,763	928	0	23	0	-16	
15	402.08	539,538	4,657	2,786	0	23	0	-415	
16	402.25	540,907	1,369	922	0	26	0	-206	
17	402.55	543,324	2,417	1,275	0	72	0	16	
18	403.22	548,737	5,413	3,298	0	73	0	-496	
19	403.76	553,115	4,378	2,571	0	65	0	-299	
20	404.03	555,309	2,194	1,353	0	74	0	-173	
21	404.26	557,180	1,871	1,238	0	77	0	-218	
22	404.80	561,582	4,402	2,663	0	70	0	-374	
23	404.95	562,808	1,226	873	0	105	0	-150	
24	405.10	564,034	1,226	875	0	115	0	-142	
25	405.64	568,456	4,422	2,680	0	130	0	-321	
26	406.89	578,743	10,287	5,962	0	137	0	-639	
27	407.48	583,623	4,880	2,948	0	120	0	-368	
28	408.26	590,097	6,474	3,916	0	114	0	-538	
29	409.60	601,282	11,185	6,372	0	112	0	-621	
30	410.06	605,139	3,857	1,875	0	153	0	223	
Total				102,909	60,987	0	2,142	0	-6,962
Mean cfs				---	2,033	0	71	0	-232
Acre-feet				102,909	121,434	0	4,254	0	-14,271

1/ Pacheco Tunnel, San Felipe Split; Santa Clara 4,205 AF, Casa De Fruta 0 AF, and San Benito 49 AF.

Table 16. San Luis Field Division Plant Data

(in acre-feet)

November 2009

Date	Dos Amigos Pumping Plant		Gianelli Pumping - Generating Plant				San Felipe Project
	Total Pumping	SWP Pumping 1/ 2/	Total Generation	SWP Generation 1/ 2/	Total Pumping	SWP Pumping 1/ 2/	Federal
1	6,208	6,208	0	0	11,684	359	134
2	2,890	2,890	0	0	8,956	236	143
3	2,874	2,874	0	0	8,100	134	82
4	3,252	3,252	0	0	0	0	141
5	3,931	1,900	0	0	0	0	68
6	3,587	1,543	0	0	0	0	48
7	5,252	3,210	0	0	0	0	48
8	4,915	2,840	0	0	0	0	49
9	3,251	1,219	0	0	0	0	99
10	1,954	-98	0	0	0	0	120
11	4,147	2,028	0	0	0	0	123
12	3,428	1,343	0	0	2,787	2,787	119
13	3,920	1,825	0	0	5,539	3,758	128
14	2,824	774	0	0	1,841	39	45
15	4,547	2,407	0	0	5,527	182	46
16	3,956	1,859	0	0	1,828	479	52
17	3,284	1,210	0	0	2,529	2,529	142
18	1,504	-604	0	0	6,541	2,957	145
19	2,688	594	0	0	5,099	2,427	129
20	3,176	1,137	0	0	2,683	862	146
21	3,517	1,412	0	0	2,455	674	152
22	4,510	2,384	0	0	5,283	54	139
23	2,624	595	0	0	1,732	-23	209
24	1,739	1,211	0	0	1,736	901	228
25	1,430	900	0	0	5,316	4,480	257
26	1,554	1,019	0	0	11,826	6,820	271
27	1,543	1,021	0	0	5,848	5,015	239
28	1,546	1,016	0	0	7,767	6,723	226
29	1,445	918	0	0	12,638	7,716	223
30	1,638	1,116	0	0	3,719	2,901	303
Total	93,134	50,003	0	0	121,434	52,010	4,254

1/ Negative values may appear in SWP columns and indicate a mismatch of scheduled CVP energy and actual pumping;
adjustments to SWP water shares are made to balance the mismatch.

2/ Provisional, subject to change.

Table 17. Consolidated State-Federal Los Banos Reservoir

Daily Operations
November 2009

United States
Department of the Interior
Bureau of Reclamation
Central Valley Project

State of California
The Resources Agency
Department of Water Resources
State Water Project

Capacity 34,560 ac-ft

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Estimated Inflow (cfs)	Estimated Outflow (cfs)		Computed Losses (-) Gains (+) (ac-ft)
					Spill	Outlet	
Oct 31	321.12	17,569					
1	321.11	17,564	-5	0	0	0	-5
2	321.11	17,564	0	0	0	0	0
3	321.11	17,564	0	0	0	0	0
4	321.09	17,556	-8	0	0	0	-8
5	321.09	17,556	0	0	0	0	0
6	321.08	17,552	-4	0	0	0	-4
7	321.06	17,543	-9	0	0	0	-9
8	321.04	17,534	-9	0	0	0	-9
9	321.04	17,534	0	0	0	0	0
10	321.04	17,534	0	0	0	0	0
11	321.03	17,530	-4	0	0	0	-4
12	321.02	17,526	-4	0	0	0	-4
13	321.01	17,521	-5	0	0	0	-5
14	321.00	17,517	-4	0	0	0	-4
15	320.98	17,509	-8	0	0	0	-8
16	320.97	17,504	-5	0	0	0	-5
17	320.97	17,504	0	0	0	0	0
18	320.95	17,496	-8	0	0	0	-8
19	320.95	17,496	0	0	0	0	0
20	320.94	17,491	-5	0	0	0	-5
21	320.93	17,487	-4	0	0	0	-4
22	320.92	17,483	-4	0	0	0	-4
23	320.91	17,478	-5	0	0	0	-5
24	320.90	17,474	-4	0	0	0	-4
25	320.90	17,474	0	0	0	0	0
26	320.90	17,474	0	0	0	0	0
27	320.90	17,474	0	0	0	0	0
28	320.87	17,461	-13	0	0	0	-13
29	320.86	17,457	-4	0	0	0	-4
30	320.86	17,457	0	0	0	0	0
Total			-112	0	0	0	-112
Mean cfs			---	0	0	0	---
Acre-feet			-112	0	0	0	-112

Table 18. Consolidated State-Federal Little Panoche Reservoir

Daily Operations

November 2009

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

Capacity: 5,580 ac-ft

State of California

The Resources Agency

Department of Water Resources

State Water Project

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Estimated Inflow (cfs)	Estimated Outflow (cfs)		Computed Losses (-) Gains (+) (ac-ft)
					Spill	Outlet	
Oct 31	598.00	588					
1	Not Observed						
2	Not Observed						
3	Not Observed						
4	Not Observed						
5	Not Observed						
6	Not Observed						
7	Not Observed						
8	Not Observed						
9	Not Observed						
10	Not Observed						
11	Not Observed						
12	598.00	588	0	0	0	0	0
13	Not Observed						
14	Not Observed						
15	Not Observed						
16	Not Observed						
17	Not Observed						
18	Not Observed						
19	Not Observed						
20	Not Observed						
21	Not Observed						
22	Not Observed						
23	Not Observed						
24	Not Observed						
25	Not Observed						
26	Not Observed						
27	Not Observed						
28	Not Observed						
29	Not Observed						
30	598.00	588	0	0	0	0	0
Total			0	0	0	0	0
Mean cfs			---	0	0	0	---
Acre-feet			0	0	0	0	0

Table 19. Governor Edmund G. Brown California Aqueduct

San Luis Field Division, Monthly Deliveries

(In acre-feet)

November 2009

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
	Beginning and Ending		Mile			USBR	Transfer	DWR Recreation	USBR Recreation		
	No.	Structure									
2B	12	Check No. 12	66.71		82,641						
3A		San Luis Reservoir		Department of Parks and Recreation	0	4,205	49	0	0		
				San Felipe Division Santa Clara Water District	4,205						
				Casa de Fruta Santa Clara Water District	0						
				San Felipe Division San Benito Water District	49						
				Reach 3A Subtotal:	4,254	4,254	0	0	0		
				Department of Parks and Recreation	2						
3	13	O'Neill Forebay	70.85	Cattle Program	1						
				Department of Fish & Game	82						
			70.91 Thru 85.08	San Luis Water District	24	24	1 / 75	45	37		
				(Floodwater Inflow)	75						
				Reach 3 Subtotal:	184						
			Dos Amigos Pumping Plant	86.73	93,134	2,454	99	47	38		
			89.03 Thru 94.06	San Luis Water District	2,454						
			89.66 Thru 89.67	Pacheco Water District	260						
			89.68	Panoche Water District	38						
4	14		89.70 Check No. 14	City of Dos Palos	81						
			95.06								
			98.15 Thru 104.20	San Luis Water District	315	315	374	1,117			
			96.15 Thru 102.64	Panoche Water District	374						
			102.64 (Floodwater Inflow)	0							
			102.64 Thru 105.22	Broadview Water District	0						
			105.22 Thru 108.64	Westlands Water District	1,117						
			108.50 Check No.15								
			Reach 4 Subtotal:	4,639	4,639	4,639	0	0	0		
			San Felipe Division Total:	4,254	4,254						
			Pacheco Water District Total:	260	260						
			Broadview Water District Total:	0	0						
			City of Dos Palos Total:	81	81						
			SLWD Reach 4 Subtotal:	2,769	2,769						
			Panoche Water District Total:	412	412						
			SLWD Total:	2,793	2,793						
			Westlands WD Reach 4 Subtotal:	1,117	1,117						

1/ Pump-in Credit recovered by San Luis Water District.

Table 19. Governor Edmund G. Brown California Aqueduct

San Luis Field Division, Monthly Deliveries (Continued)

(In acre-feet)

November 2009

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries							
	Beginning and Ending		Mile			USBR	Transfer	DWR Recreation	USBR Recreation				
	No.	Structure											
5	16		110.52	(Reverse flow, Kings River)	0	2,372							
				Westlands Water District	2,372								
				Thru Dept. of Fish and Game @ Lat. 4L	0								
				122.05 Dept. of Fish and Game @ Lat. 6L	0								
				Dept. of Fish and Game @ Lat. 7L	0								
	17	Check No. 16	122.07			610							
			124.18	Westlands Water District	610								
			132.74										
	18	Check No. 17	132.95			1,916							
			133.81	Westlands Water District	1,916								
			142.61										
		Pleasant Valley Pumping Plant	143.16	Westlands Water District	1,155		1,155						
			143.16	City of Coalinga	280								
		Check No. 18	143.23										
					Reach 5 Subtotal:	6,333	6,333	0	0				
6	19		145.26	GWF Energy	1	1/ 1							
				City of Huron	0								
				SWP Construction @ Lat. 24R	0		2/ 168						
				Thru Kings County to Lemoore NAS Through WWD	168								
				DWR Water Truck	4		4						
				Westlands Water District	1,237								
			Check No. 19	155.64			1,237	169	0				
7	20		151.19	Reach 6 Subtotal:	1,410	1,241	1,241	169	0				
				156.34 City of Huron	83	83							
				156.40 SWP Construction @ Lat. 24R	0								
				Thru Kings County through WWD 31L, 32L, 33L, 34L, 35L, 36L	0								
				163.69 Westlands Water District	1,017	1,017							
	21	Check No. 20	164.69										
			164.79 City of Avenal	176	176								
			167.04 Thru Westlands Water District	414	414								
			171.67										
		Check No. 21	172.40		76,214								
				Reach 7 Total:	1,690	1,690	0	0	0				
				SWP Construction Total:	0	0	0	0	0				
				Westlands WD Total:	9,838	9,838	0	0	0				
				City of Coalinga Total:	280	280	0	0	0				
				City of Huron Total:	83	83	0	0	0				
				Kings County to Lemoore NAS Through WWD	168	0	168	0	0				
				City of Avenal Total:	176	176	0	0	0				
				Total San Luis Field Division Deliveries:	18,510	18,256	169	47	38				

1/ GWF Energy (Henrietta Peaker Project) from County of Kings to Westlands Water District.

2/ From County of Kings to Lemoore NAS through WWD 29L and 30L. 21

Table 20. Consolidated State-Federal San Luis Canal 1/

Daily Operations
November 2009

United States
Department of the Interior
Bureau of Reclamation
Central Valley Project

State of California
The Resources Agency
Department of Water Resources
State Water Project

Date	Storage In Canal (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)		Outflow (cfs)				Computed Losses (-) Gains (+) (cfs)
			Non- Project	Dos Amigos Pumping Plant	San Luis Water District Pools 14 & 15 2/	Panoche Water District Pools 14 & 15	Westlands Water District Pools 15 thru 21 3/	Flow Past Check 21	
Oct 31	27,377								
1	27,371	-6	0	3,130	75	11	258	2,816	27
2	27,841	470	0	1,457	75	11	258	883	7
3	27,687	-154	0	1,449	75	11	258	1,164	-19
4	27,991	304	0	1,640	75	11	258	1,073	-70
5	28,466	475	0	1,982	70	5	176	1,336	-156
6	28,536	70	0	1,808	40	5	176	1,360	-192
7	28,382	-154	0	2,648	40	5	176	2,457	-47
8	28,332	-50	0	2,478	40	5	176	2,336	54
9	28,624	292	0	1,639	40	5	176	1,216	-55
10	27,938	-686	0	985	40	5	176	1,074	-36
11	28,402	464	0	2,091	40	5	176	1,516	-120
12	28,706	304	0	1,728	72	6	161	1,218	-118
13	29,435	729	0	1,976	72	6	161	1,284	-85
14	28,704	-731	0	1,424	72	6	161	1,595	41
15	28,201	-503	0	2,292	72	6	161	2,388	82
16	28,892	691	0	1,994	72	6	161	1,366	-40
17	29,323	431	0	1,656	72	6	161	1,195	-4
18	28,603	-720	0	758	49	5	161	835	-71
19	28,510	-93	0	1,355	49	5	147	1,105	-96
20	28,640	130	0	1,601	49	5	147	1,267	-68
21	28,654	14	0	1,773	49	5	147	1,483	-82
22	28,786	132	0	2,274	49	5	147	1,959	-48
23	28,927	141	0	1,323	49	7	147	1,051	2
24	28,268	-659	0	877	49	7	147	1,038	31
25	28,168	-100	0	721	35	7	147	555	-27
26	28,523	355	0	783	35	7	153	427	17
27	28,546	23	0	778	35	10	0	598	-123
28	28,548	2	0	779	35	10	185	606	58
29	28,346	-202	0	729	23	10	188	663	53
30	28,446	100	0	826	20	10	188	561	4
Total		1,069	0	46,954	1,568	208	5,134	38,424	-1,081
Mean cfs		---	0	1,565	52	7	171	1,281	-36
Acre-feet		1,069	0	93,134	3,110	412	10,550	76,214	-1,779

1/ San Luis Canal includes Pools 14 through 21 of the California Aqueduct.

2/ Includes 260 AF to Pacheco W.D., 81 AF to the City of Dos Palos and 2,769 AF to San Luis Water District.

3/ Includes 83 AF to the City of Huron, 176 AF to the City of Avenal, 280 AF to the City of Coalinga, 0 AF to Huron P&R @ 22R, 168 AF to Lemoore N.A.S. @ 29L, 1 AF to GWF @ 30L, 4 AF to DWR Water Truck at 22R, 0 AF to Kings County @ 30L, 0 AF to Broadview WD @ 3L, 0 AF to DFG @ 4L, 0 AF to Mendota Water Fowl Habitat Area @ 6L, 0 AF DFG @ 7L, 0 AF NonProject Water, 8,683 AF to Westlands Water District and 1,155 AF to Pleasant Valley Pumping Plant.

Table 21. San Joaquin Field Division Plant Data

(in acre-feet)

November 2009

23

Date	Coastal Aqueduct					California Aqueduct			
	Las Perillas Pumping Plant	Badger Hill Pumping Plant	Devil's Den Pumping Plant	Bluestone Pumping Plant	Polonio Pass Pumping Plant	Buena Vista Pumping Plant	Teerink Pumping Plant	Chrisman Pumping Plant	Edmonston Pumping Plant
1	0	12	22	20	25	7,012	7,383	7,172	7,193
2	0	0	2	0	0	3,511	3,918	3,722	3,790
3	0	0	0	0	0	3,622	3,655	3,492	3,470
4	0	0	0	0	0	3,847	4,079	3,890	3,908
5	0	0	0	0	0	4,016	4,116	3,928	3,940
6	0	0	0	0	0	3,958	4,054	3,915	3,983
7	0	0	0	0	0	6,429	6,959	6,640	6,728
8	0	0	0	0	0	6,235	6,820	6,590	6,570
9	0	0	0	0	0	3,852	4,217	3,982	4,007
10	0	0	0	0	0	3,669	4,189	4,002	3,988
11	0	0	0	0	0	4,425	4,618	4,427	4,445
12	0	0	0	0	0	4,046	4,618	4,448	4,488
13	0	0	0	0	0	4,110	4,571	4,357	4,434
14	0	0	0	0	0	5,280	5,560	5,386	5,468
15	0	0	0	0	0	6,035	6,799	6,650	6,712
16	0	0	0	0	0	4,357	4,673	4,435	4,448
17	0	0	0	0	0	4,158	4,544	4,408	4,340
18	0	0	0	0	0	3,318	3,738	3,599	3,682
19	0	0	0	0	0	4,319	4,654	4,518	4,528
20	0	0	0	0	0	4,320	4,681	4,505	4,496
21	230	177	6	4	3	4,799	5,433	5,276	5,404
22	43	47	47	43	47	5,563	6,215	6,020	6,118
23	36	40	0	0	2	4,183	4,494	4,315	4,343
24	96	121	89	81	89	3,138	3,632	3,453	3,572
25	92	100	75	71	75	2,498	2,964	2,874	2,844
26	76	93	62	57	64	2,735	3,051	2,970	2,962
27	82	92	55	50	56	2,653	2,985	2,947	2,960
28	77	90	64	58	65	2,708	3,037	2,955	3,022
29	86	94	62	56	62	2,661	2,952	2,864	2,812
30	19	30	38	34	40	2,461	2,883	2,840	2,809
Total	837	896	522	474	528	123,917	135,491	130,579	131,464

Table 22. Governor Edmund G. Brown California Aqueduct

San Joaquin Field Division, Monthly Deliveries

(In acre-feet)

November 2009

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending		No.			Table A	USBR	Kern Water Bank Recovery	Pump Recovery	Other		
	No.	Structure	Mile									
7	21	Check No. 21	172.40		76,214							
8C	22		172.66	Empire West Side ID TL - A	0	25	47	29	1,245	0		
				County of Kings TL - A	0							
				Tulare Lake Basin WSD TL-A	25							
			175.18	Dudley Ridge WD - 1	0							
			177.54	Dudley Ridge WD - 1B	0							
			180.64	Tulare Lake Basin WSD - C	0							
			180.65	Dudley Ridge WD - 1A	47							
			182.99	Dudley Ridge WD - 2	29							
			183.00	Tulare Lake Basin WSD TL - B	0							
				County of Kings TL-B	0							
8D			184.00	Dudley Ridge WD - Paramount	0							
			184.63	Coastal Branch	837							
31A	8D		184.78	Dudley Ridge WD - 3	1,245							
				Dudley Ridge Reach 8D Total:	1,321	0	0	1,321	0	0		
				Tulare Lake Basin WSD Total:	25	25	0	0	0	0		
		Check No. 22	184.82									
9	23		189.69	Kern County Water Agency Lost Hills Water Dist. - 1	71	0	0	0	152	71		
			191.18	Kern County Water Agency Lost Hills Water Dist. - 2	0							
			194.22	Kern County Water Agency Lost Hills Water Dist. - 3	9							
			196.40	Kern County Water Agency Berrenda Mesa - 2	16							
			196.75	Kern County Water Agency Lost Hills Water Dist. - 4	56							
				KCWA Reach 9 Subtotal:	152							
			Check No. 23	197.05								
10A	24		201.24	Kern County Water Agency Lost Hills Water Dist. - 7	83	5,272	5,272	0	160	83		
			202.05	Kern County Water Agency Lost Hills Water Dist. - 5	76							
			204.69	Kern County Water Agency Lost Hills Water Dist. - 6	0							
			205.26	Kern County Water Agency Lost Hills Water Dist. - 8	1							
			Check No. 24	207.94								
10A	25		209.71	Kern County Water Agency Belridge Water Storage Dist. - 1A	0	0	0	0	160	0		
			209.78	Kern National Wildlife Refuge USBR BV-1B	5,272							
				Kern County Water Agency Buena Vista WSD 1B	0							
			209.80	KCWA Semitropic WSD	0							
				KCWA Semitropic WSD Penstocks	0							
				USBR Total:	5,272	0	5,272	0	0	0		
				KCWA Reach 10A Subtotal:	160	0	0	0	160	0		

Table 22. Governor Edmund G. Brown California Aqueduct

San Joaquin Field Division, Monthly Deliveries (Continued)

(In acre-feet)

November 2009

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A	USBR	Kern Water Bank Recovery	Pump Recovery	Other		
	No.	Structure	Mile									
11B	25		210.75	Kern County Water Agency Belridge - 2	0				852	2/ 300		
			214.11	Kern County Water Agency Belridge - 3	1,152							
			216.62	Kern County Water Agency Belridge - 4	0							
			217.13	Kern County Water Agency Belridge - 5A-C	652							
				Kern County Water Agency Belridge - 5D	115							
		Check No. 25	217.79									
				KCWA Reach 11B Subtotal:	1,919	0	0	0	1,619	300		
12D	26		219.58	Kern County Water Agency Belridge - 6	0				443			
				Kern County Water Agency West Kern - 3	443							
		Check No. 26	224.92									
12E	27		230.37	Kern County Water Agency Buena Vista - 6	0							
				Check No. 27	231.73							
			235.75	Kern County Water Agency Buena Vista - 2	0							
				Kern County WA CVC	0							
				DRWD CVC	0							
				Tulare Co.	0							
			238.04	Lower Tule River	0							
				Fresno Co.	0							
				Pixley ID	0							
				Hacienda								
				DWR Wells	0							
	Check No. 28		238.11									
				1/ Arvin Edison Total:	0	0	0	0	0	0		
				Reach 12E Subtotal:	0	0	0	0	0	0		
13B	29		238.19	Kern Water Bank Inflow	0							
				Kern Water Bank Outflow	0							
				241.02 Kern River Intertie (inflow)	0							
				242.85 KCWA Buena Vista WSD - 7	0							
				KCWA Buena Vista WSD - 5	0							
				243.09 Kern County Water Agency Buena Vista - 3	0							
		Check No. 29	244.54									
			249.85	Kern County Water Agency Buena Vista - 4	0							
			250.99		123,917							
				KCWA Reach 13B Subtotal:	0	0	0	0	0	0		
14A	31		254.47	Kern County Water Agency West Kern - 2	0				45			
			256.11	Kern County Water Agency Wheeler Ridge-Maricopa - 2	45							

1/ Arvin Edison Contractors include Rag Gulch WD, Kern-Tulare WD, Fresno County, Hills Valley ID, Tri Valley WD, Tulare County, Lower Tule River ID, and Pixley ID.

2/ Transfer of Table A from Dudley Ridge WD.

Table 22. Governor Edmund G. Brown California Aqueduct

San Joaquin Field Division, Monthly Deliveries (Continued)

(In acre-feet)

November 2009

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A	USBR	Kern Water Bank Recovery	Pump Recovery	Other		
	No.	Structure	Mile									
14A	31	Check No. 31	256.14									
	32		258.61		Kern County Water Agency Wheeler Ridge-Maricopa - 3	141				141		
			260.44		Kern County Water Agency Wheeler Ridge-Maricopa - 4	329				329		
		Check No. 32	261.72									
		KCWA Reach 14A Subtotal:	515		0	0	0	515				
		0										
14B	33		264.42		Kern County Water Agency Wheeler Ridge-Maricopa - 5	1,151				1,151		
			266.91		Kern County Water Agency Wheeler Ridge-Maricopa - 6	192				192		
		Check No. 33	267.36									
	34		270.24		Kern County Water Agency Wheeler Ridge-Maricopa - 7	1,127				1,127		
			271.27									
			Reach 14B Total:		2,470	0	0	0	2,470			
14C	35		272.39		Kern County Water Agency Wheeler Ridge-Maricopa - 8	566				566		
			276.09		Kern County Water Agency Wheeler Ridge-Maricopa - 9	226				226		
			277.30		Kern County Water Agency Arvin-Edison WSD	0						
			Reach 14C Total:		792	0	0	0	792			
	Teerink Pumping Plant		278.13		135,491							
15A	36		279.02		Kern County Water Agency Wheeler Ridge-Maricopa - 9A	363				363		
			280.06		Kern County Water Agency Wheeler Ridge-Maricopa - 10	123				123		
			Reach 15A Total:		486	0	0	0	486			
	Chrisman Pumping Plant		280.36		130,579							
16A	37		282.06		Kern County Water Agency Wheeler Ridge-Maricopa - 11	0						
			283.95									
			Kern County Water Agency Wheeler Ridge-Maricopa - 12		14	14						
	38		285.01		Kern County Water Agency Wheeler Ridge-Maricopa - 13A	20				20		
			286.39		Kern County Water Agency Wheeler Ridge-Maricopa - 13B	0						
			287.06		Kern County Water Agency Wheeler Ridge-Maricopa - 14	565				565		
	Check No. 38		287.09									
	39		287.62		Kern County Water Agency Wheeler Ridge-Maricopa - 15	20				20		
			290.21		Kern County Water Agency Tehachapi Cummings CWD	0						
	40		291.26		KCWA Reach 16A Subtotal:	646	0	0	0	646		
17E	Edmonston Pumping Plant		293.45		131,464							

Table 23. Governor Edmund G. Brown California Aqueduct

San Joaquin Field Division, Monthly Deliveries (Coastal Branch)

(In acre-feet)

November 2009

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
	Beginning and Ending		No.			Table A	USBR	Kern Water Bank Recovery	Pump Recovery	Other	
	No.	Structure	Mile								
31A	C-1	Coastal Branch Control	0.02		837						
		Las Perillas Pumping Plant	1.16		837						
	C-2		3.79	Green Valley Water District	0						
		Badger Hill Pumping Plant	4.27		896						
	C-3	Coastal Check No. 3	7.21								
	C-4		9.34	Castaic Lake WA (Devil's Den WD #1)	0						
		Coastal Check No. 4	9.34								
	C-5	Coastal Check No. 5	12.20								
	C-6		13.30	Kern County Water Agency Berrenda Mesa - 3	0						
			14.83	Kern County Water Agency Berrenda Mesa - 1	137					137	
				Kern County Water Agency Berrenda Mesa - PO	0						
		Devil's Den Pumping Plant	14.86		522						
				KCWA Reach 31A Subtotal:	137	0	0	0	137	0	
				KCWA Total:	7,720	0	0	0	6,774	946	
33A	C-7	Bluestone Pumping Plant	19.05		474						
	C-8	Polonio Pass Pumping Plant	26.54		528						
	C-9	Tank Site 1	27.81	(CCWA) Polonio Pass Treatment Plant	0						
	C-10	Shandon T.O.	38.23	Santa Barbara County (CCWA)	381	170				1/ 211	
	C-11	Tank Site 2	58.63	Central Coast:	0	139					
34	Chorro Valley T.O.	69.31	San Luis Obispo County (CCWA)		139						
	Energy Dissipater	78.12									
35	Lopez T.O.	85.86	SLOCFC & WCD		0						
			CCWA Total:		520	309	0	0	0	211	
	Guadalupe T.O.	102.70	SBCFC & WCD		0						
	Santa Maria T.O.	107.43	SBCFC & WCD		0						
38	So. Cal. Water T.O.	109.20	SBCFC & WCD		0						
			SBCFC & WCD Total:		0	0	0	0	0	0	
	Tank Site 5	115.42									

1/ Transfer of San Luis Obispo's Table A to Santa Barbara.

Table 24. Southern Field Division Plant Data

November 2009

(in acre-feet)

Date	West Branch						East Branch								East Branch Extension		
	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant		Alamo Powerplant			Pearblossom Pumping Plant	Mojave Siphon Powerplant			Devil Canyon Powerplant Generation	Green Spot	Crafton Hills	Cherry Valley
		Generation	Leakage	Gorman Crk. Improvement Channel	Generation 1/	Pumpback 1/	Bypass Through Plant	Tehachapi Afterbay Bypass	Generation	Leakage	Bypass Flume						
1	2,551	1,109	0	982	1,673	0	2,969	0	880	3,977	3,910	0	0	2,619	40	39	17
2	1,632	1,055	0	943	2,764	0	1,757	0	388	1,726	1,814	0	0	2,125	9	0	15
3	1,592	1,059	0	943	2,468	0	1,621	0	207	1,806	1,819	0	0	2,109	51	34	15
4	1,756	1,063	0	943	2,311	0	1,819	0	207	2,655	1,981	0	0	2,514	58	48	26
5	1,841	1,063	0	943	2,457	598	1,786	0	362	2,100	1,922	0	0	2,600	54	51	25
6	1,855	1,064	0	943	2,976	0	1,914	0	256	2,050	2,035	0	0	2,529	53	51	16
7	2,535	1,062	0	943	491	559	2,370	0	1,150	3,091	3,334	0	0	2,542	54	52	18
8	2,877	1,054	0	943	754	0	2,884	0	777	3,490	3,205	0	0	2,473	26	25	19
9	1,628	1,054	0	943	3,115	0	1,927	0	277	2,124	2,000	0	0	2,730	0	0	0
10	1,637	1,057	0	943	3,000	0	1,988	0	289	2,140	2,208	0	0	2,641	53	51	16
11	1,768	1,062	0	943	2,938	1,024	2,195	0	396	2,439	2,290	0	0	2,609	28	26	18
12	1,770	1,059	0	943	3,409	588	2,448	0	0	2,387	2,320	0	0	2,590	54	51	27
13	1,831	1,061	0	943	2,630	749	2,198	0	434	2,467	2,475	0	0	2,517	54	52	26
14	2,316	1,066	0	943	225	0	2,536	0	289	2,633	2,838	0	0	2,615	52	51	17
15	2,848	1,053	0	943	248	0	2,815	0	587	3,476	3,844	0	0	2,476	21	19	19
16	1,821	1,053	0	943	3,303	0	2,051	0	579	2,417	2,472	0	0	2,584	27	23	16
17	1,899	1,057	0	943	3,244	0	2,368	0	182	2,491	2,653	0	0	2,481	55	51	15
18	1,487	1,059	0	943	2,105	0	2,137	0	99	2,070	2,175	0	0	2,841	54	52	27
19	1,861	1,065	0	943	2,228	842	2,266	0	0	2,031	1,633	0	0	2,402	46	45	26
20	1,928	1,064	0	943	2,504	0	2,276	0	372	2,352	2,340	0	0	2,491	40	38	16
21	2,379	1,064	0	943	311	0	2,524	0	372	2,747	2,870	0	0	2,433	33	31	14
22	2,607	1,053	0	943	238	0	2,747	0	389	3,215	3,295	0	0	2,339	21	19	13
23	1,366	1,059	0	943	3,130	0	2,149	0	537	2,439	2,652	0	0	2,439	0	0	11
24	1,851	1,057	0	943	2,302	932	1,772	0	50	1,580	1,846	0	0	1,472	41	35	10
25	1,944	1,058	0	943	2,208	0	1,101	0	0	1,006	743	0	0	776	40	38	10
26	2,033	1,061	0	943	2,472	0	768	0	0	616	637	0	0	683	45	38	6
27	2,034	1,060	0	943	2,899	0	738	0	0	611	632	0	0	722	36	24	12
28	2,030	1,058	0	943	244	0	744	0	0	605	634	0	0	698	35	28	11
29	2,021	1,061	0	943	941	0	817	0	0	805	639	0	0	660	35	23	11
30	1,865	1,057	0	943	3,234	822	1,096	0	0	674	713	0	0	677	35	23	10
Total	59,563	31,827	0	28,329	62,822	6,114	58,781	0	9,079	64,220	63,929	0	0	63,387	1,150	1,018	482

1/ Values supplied by LADWP, not verified by DWR.

Table 25. Pyramid Lake

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

November 2009

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)		
				Project		Natural	Stream Flow	Project		To Piru Creek			
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel		Recrea-tion Deliveries	Natural	Del. To United W.A.			
Oct 31	2576.64	168,151											
1	2576.86	168,434	283	0	1,109	982	13	1,673	0	12	0	-136	
2	2576.02	167,357	-1,077	0	1,055	943	13	2,764	0	12	0	-312	
3	2575.56	166,770	-587	0	1,059	943	13	2,468	0	12	0	-122	
4	2575.14	166,235	-535	0	1,063	943	13	2,311	1	0	48	-194	
5	2575.20	166,311	76	598	1,063	943	13	2,457	0	0	48	-36	
6	2574.41	165,308	-1,003	0	1,064	943	13	2,976	0	0	48	1	
7	2575.85	167,140	1,832	559	1,062	943	13	491	0	0	48	-206	
8	2576.68	168,203	1,063	0	1,054	943	14	754	0	0	48	-146	
9	2575.65	166,885	-1,318	0	1,054	943	14	3,115	0	0	48	-166	
10	2574.67	165,638	-1,247	0	1,057	943	14	3,000	0	0	48	-213	
11	2574.62	165,574	-64	1,024	1,062	943	14	2,938	1	0	48	-120	
12	2574.00	164,788	-786	588	1,059	943	14	3,409	0	0	48	67	
13	2574.03	164,826	38	749	1,061	943	14	2,630	0	0	48	-51	
14	2575.33	166,477	1,651	0	1,066	943	14	225	0	0	48	-99	
15	2576.55	168,036	1,559	0	1,053	943	14	248	0	0	48	-155	
16	2575.14	166,235	-1,801	0	1,053	943	14	3,303	0	0	48	-460	
17	2574.02	164,814	-1,421	0	1,057	943	15	3,244	0	10	0	-182	
18	2573.85	164,599	-215	0	1,059	943	15	2,105	1	10	0	-116	
19	2574.18	165,016	417	842	1,065	943	15	2,228	0	10	0	-210	
20	2573.74	164,460	-556	0	1,064	943	15	2,504	0	10	0	-64	
21	2574.82	165,828	1,368	0	1,064	943	15	311	0	10	0	-333	
22	2576.42	167,869	2,041	0	1,053	943	16	238	0	10	0	277	
23	2575.11	166,197	-1,672	0	1,059	943	15	3,130	0	10	0	-549	
24	2575.12	166,210	13	932	1,057	943	15	2,302	0	10	0	-622	
25	2575.76	167,025	815	0	1,058	943	16	2,208	0	10	0	1,016	
26	2574.32	165,194	-1,831	0	1,061	943	15	2,472	1	12	8	-1,357	
27	2573.29	163,892	-1,302	0	1,060	943	16	2,899	0	53	58	-311	
28	2574.56	165,498	1,606	0	1,058	943	17	244	0	30	180	42	
29	2575.12	166,210	712	0	1,061	943	17	941	0	30	180	-158	
30	2574.53	165,460	-750	822	1,057	943	17	3,234	0	30	180	-145	
Total				-2,691	6,114	31,827	28,329	436	62,822	4	281	1,230	-5,060

1/ Values supplied by LADWP, not verified by DWR.

Table 26. Elderberry Forebay

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

November 2009

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)	
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake			
							Natural	Project 1/		
Oct 31	1506.12	17,721								
1	1510.49	19,373	1,652	1,673	0	0	0	0	-21	
2	1517.33	22,117	2,744	2,764	0	0	0	0	-20	
3	1515.90	21,527	-590	2,468	0	0	0	3,441	383	
4	1511.05	19,590	-1,937	2,311	0	0	0	4,222	-26	
5	1507.56	18,257	-1,333	2,457	0	598	0	3,192	0	
6	1508.06	18,445	188	2,976	0	0	0	2,789	1	
7	1507.62	18,280	-165	491	0	559	0	97	0	
8	1509.62	19,038	758	754	0	0	0	0	4	
9	1510.80	19,493	455	3,115	0	0	0	2,660	0	
10	1509.46	18,977	-516	3,000	0	0	0	3,516	0	
11	1507.38	18,190	-787	2,938	0	1,024	0	2,701	0	
12	1508.37	18,562	372	3,409	0	588	0	2,552	103	
13	1508.83	18,737	175	2,630	0	749	0	1,302	-404	
14	1509.08	18,832	95	225	0	0	0	0	-130	
15	1509.84	19,123	291	248	0	0	0	0	43	
16	1518.20	22,480	3,357	3,303	0	0	0	0	54	
17	1518.27	22,509	29	3,244	0	0	0	3,214	-1	
18	1513.39	20,512	-1,997	2,105	0	0	0	4,498	396	
19	1508.63	18,661	-1,851	2,228	0	842	0	3,255	18	
20	1508.17	18,487	-174	2,504	0	0	0	2,612	-66	
21	1507.01	18,052	-435	311	0	0	0	825	79	
22	1506.48	17,854	-198	238	0	0	0	0	-436	
23	1514.92	21,128	3,274	3,130	0	0	0	0	144	
24	1512.73	20,250	-878	2,302	0	932	0	2,248	0	
25	1508.60	18,650	-1,600	2,208	0	0	0	3,808	0	
26	1507.09	18,081	-569	2,472	0	0	0	3,040	-1	
27	1507.07	18,074	-7	2,899	0	0	0	2,907	1	
28	1507.68	18,302	228	244	0	0	0	0	-16	
29	1510.26	19,284	982	941	0	0	0	0	41	
30	1516.14	21,625	2,341	3,234	0	822	0	0	-71	
Total				3,904	62,822	0	6,114	0	52,879	
									75	

1/ Values supplied by LADWP, not verified by DWR.

Table 27. Castaic Lake

Daily Operation

(in acre-feet except as noted)

Capacity: 323,699 ac-ft

November 2009

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow		Computed Losses (-) And Gains (+)	
				From Elderberry Forebay 1/		Natural	Deliveries	Released To Castaic Lagoon		
				Natural	Project					
Oct 31	1456.74	208,050								
1	1455.98	206,720	-1,330	0	0	0	1,357	0	27	
2	1455.22	205,394	-1,326	0	0	0	1,314	0	-12	
3	1456.25	207,192	1,798	0	3,441	0	1,361	0	-282	
4	1457.85	210,001	2,809	0	4,222	0	1,321	0	-92	
5	1458.81	211,696	1,695	0	3,192	0	1,373	0	-124	
6	1459.58	213,060	1,364	0	2,789	1	1,407	0	-19	
7	1458.89	211,837	-1,223	0	97	1	1,372	0	51	
8	1458.14	210,512	-1,325	0	0	1	1,220	0	-106	
9	1458.89	211,837	1,325	0	2,660	1	1,301	0	-35	
10	1460.14	214,056	2,219	0	3,516	1	1,305	0	7	
11	1460.93	215,449	1,393	0	2,701	1	1,276	0	-33	
12	1461.61	216,680	1,231	0	2,552	1	1,214	0	-108	
13	1461.90	217,200	520	0	1,302	1	1,114	0	331	
14	1461.25	216,036	-1,164	0	0	1	1,127	0	-38	
15	1460.65	214,964	-1,072	0	0	1	1,012	0	-61	
16	1460.05	213,896	-1,068	0	0	0	1,064	0	-4	
17	1461.25	216,036	2,140	0	3,214	0	1,040	0	-34	
18	1463.05	219,267	3,231	0	4,498	0	1,116	0	-151	
19	1464.21	221,363	2,096	0	3,255	0	1,109	0	-50	
20	1464.93	222,668	1,305	0	2,612	0	1,231	0	-76	
21	1464.66	222,178	-490	0	825	0	1,210	0	-105	
22	1464.02	221,019	-1,159	0	0	0	1,204	0	45	
23	1463.28	219,682	-1,337	0	0	0	1,444	0	107	
24	1464.05	221,073	1,391	0	2,248	0	1,332	0	475	
25	1465.41	223,541	2,468	0	3,808	0	1,280	9	-51	
26	1466.29	225,143	1,602	0	3,040	1	1,243	10	-186	
27	1467.22	226,843	1,700	0	2,907	1	1,261	10	63	
28	1466.50	225,526	-1,317	0	0	1	1,201	10	-107	
29	1466.06	224,724	-802	0	0	1	1,216	10	423	
30	1465.18	223,123	-1,601	0	0	1	1,203	10	-389	
Total				15,073	0	52,879	15	37,228	59	-534

1/ Values supplied by LADWP, not verified by DWR.

Table 28. Governor Edmund G. Brown California Aqueduct

Southern Field Division, Monthly Deliveries (West Branch)

(In acre-feet)

November 2009

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending		No.			Table A	Rec.	Semitropic Bank Recovery	General Conveyance	Article 56C	Other	
	No.	Structure	Mile									
29A	42	Oso Pumping Plant	1.49		59,563							
29F	W2	Quail Lake	5.02	Antelope Valley-East Kern Water Agency	Re-moved	1,230	4					
		Quail Lake Embankment	7.82	Antelope Valley-East Kern Water Agency	Stub							
29G		Warne Power Plant	14.07	(28,329 AF of flow through Gorman Creek Imp. Channel)	31,827							
29H	W3	Pyramid Lake		USFS		34,123	15	3/ 1,100	544			
				Pyramid Recreation (T300)	4							
29J	W4	Pyramid Dam	17.10	United WA (T300)	1,230	1,155	154					
				California State Park Piru Fish (T300)	0							
30 1/	W5	Castaic Power Plant	25.82	(6,114 AF pumpback) 2/	62,822	35,569	15	544	1,100	0	0	
				Elderberry Forebay								
		Forebay Dam	28.12									
				California State Park								
		Castaic Lake	31.47	Castaic Lake Recreation (T301)	15	137	154					
	W6	Castaic Dam	31.6	MWDSC 78" & 132" (T302)	34,123	34,123	15	544	1,100	0	0	
				Castaic Lake WA 18", 24" & 54" (T303)	1,237							
		Castaic Lake Outlet	31.6	Castaic Lake WA Rio Vista T.P. (T304)	1,699	1,155	154					
				MWD-Ventura Co. WPD (T302)	154							
				Releases to Lagoon	59							
				Reach 30 Subtotal:	37,228							
	W6	Castaic Lagoon	31.9	California State Park Recreation to Lagoon (T353)	0							
					180							

1/ Reach 30 actually terminates at mile 31.50. It is shown here as including the outlet works at mile 31.55.

All deliveries from the outlet works and from the Lagoon are billed to Reach 30.

2/ Value Supplied by LADWP, not verified by DWR

3/ Conveyance of non-project water Article 55 from Kern County WA to Castaic Lake WA.

Table 29. Silverwood Lake

Daily Operation

(in acre-feet except as noted)

Capacity: 74,970 ac-ft

November 2009

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)	Las Flores Ranch Exchange 1/	
				Mojave Siphon Power-plant	Mojave Bypass Flume	Natural Stream Flow	Delivered to CLAWA	Rec.	San Bernardino Tunnel	Del. To Mojave W.A.	Natural To Mojave River		
Oct 31	3350.87	70,998											
1	3352.13	72,197	1,199	3,910	0	0	4	0	2,619	0	0	-88	3
2	3351.79	71,873	-324	1,814	0	0	4	0	2,125	0	0	-9	3
3	3351.48	71,577	-296	1,819	0	0	4	0	2,109	0	1	-1	3
4	3350.98	71,102	-475	1,981	0	0	5	0	2,514	0	0	63	3
5	3350.16	70,327	-775	1,922	0	0	5	0	2,600	0	0	-92	3
6	3349.69	69,885	-442	2,035	0	0	5	0	2,529	0	0	57	3
7	3350.56	70,705	820	3,334	0	0	5	0	2,542	0	1	34	3
8	3351.40	71,501	796	3,205	0	0	5	0	2,473	0	0	69	3
9	3350.59	70,733	-768	2,000	0	0	5	1	2,730	0	0	-32	3
10	3350.11	70,280	-453	2,208	0	0	4	0	2,641	0	0	-16	3
11	3349.86	70,037	-243	2,290	0	0	4	0	2,609	0	1	81	3
12	3349.49	69,697	-340	2,320	0	0	5	0	2,590	0	0	-65	3
13	3349.43	69,641	-56	2,475	0	0	5	0	2,517	0	0	-9	3
14	3349.60	69,800	159	2,838	0	2	4	0	2,615	0	0	-62	3
15	3351.09	71,207	1,407	3,844	0	0	4	0	2,476	0	1	44	3
16	3350.98	71,102	-105	2,472	0	0	4	0	2,584	0	0	11	3
17	3351.26	71,368	266	2,653	0	0	4	0	2,481	0	0	98	3
18	3350.50	70,648	-720	2,175	0	0	4	0	2,841	0	0	-50	3
19	3349.66	69,857	-791	1,633	0	2	3	1	2,402	0	1	-19	3
20	3349.43	69,641	-216	2,340	0	0	3	0	2,491	0	0	-62	3
21	3349.97	70,148	507	2,870	0	0	3	0	2,433	0	0	73	3
22	3350.92	71,045	897	3,295	0	0	3	0	2,339	0	0	-56	3
23	3351.15	71,264	219	2,652	0	0	3	0	2,439	0	1	10	3
24	3351.51	71,606	342	1,846	0	2	3	0	1,472	0	0	-31	3
25	3351.54	71,634	28	743	0	0	3	0	776	0	0	64	3
26	3351.51	71,606	-28	637	0	0	3	0	683	0	0	21	3
27	3351.34	71,444	-162	632	0	0	3	0	722	0	1	-68	3
28	3351.29	71,397	-47	634	0	0	3	0	698	0	0	20	3
29	3351.37	71,473	76	639	0	0	2	1	660	0	0	100	4
30	3351.40	71,501	28	713	0	0	3	0	677	0	1	-4	4
Total				503	63,929	0	6	116	3	63,387	0	8	82
													95

1/ Project water delivered from Mojave Siphon in exchange for like amount of Natural Streamflow.

Table 30. Lake Perris

Daily Operation

(in acre-feet except as noted)

Capacity: 131,452 ac-ft

November 2009

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow 1/	Outflow 2/	Computed Losses (-) Gains (+) 1/
Oct 31	1556.76	63,144				
1	1556.76	63,157	13		24	
2	1556.65	62,965	-192		28	
3	1556.84	63,297	332		22	
4	1556.75	63,140	-157		23	
5	1557.01	63,594	454		4	
6	1556.90	63,402	-192		5	
7	1556.95	63,489	87		5	
8	1556.95	63,489	0		5	
9	1556.90	63,402	-87		17	
10	1556.95	63,489	87		5	
11	1556.95	63,484	-5		5	
12	1557.09	63,734	250		5	
13	1557.14	63,822	88		5	
14	1557.17	63,874	52		4	
15	1557.20	63,927	53		5	
16	1557.17	63,874	-53		3	
17	1557.01	63,594	-280		6	
18	1557.14	63,822	228		5	
19	1557.17	63,874	52		4	
20	1557.06	63,681	-193		5	
21	1557.25	64,015	334		5	
22	1557.25	64,015	0		5	
23	1557.19	63,896	-119		11	
24	1557.28	64,067	171		5	
25	1557.28	64,067	0		5	
26	1557.20	63,927	-140		4	
27	1557.28	64,067	140		6	
28	1557.45	64,366	299		5	
29	1557.47	64,401	35		5	
30	1557.34	64,173	-228		7	
Total		1029		2658	242	-1387

1/ Readings are not taken on a daily basis. End of month only.

2/ Includes deliveries to MWD from Reach 28J and recreation water to California State Park at Lake Perris.

Table 31. Governor Edmund G. Brown California Aqueduct

Southern Field Division, Monthly Deliveries (East Branch)

November 2009

(In acre-feet)

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending		No.			Table A	Rec.	Semitropic Bank Recovery	General Conveyance	Article 56C	Other	
	No.	Structure	Mile									
17E	40	Edmonston Pumping Plant	293.45		131,464							
	41		298.65	KCWA Tej.-Cas	Stub							
17F		Check No. 41	303.41									
18A	42		304.99	AVEK WA-Temp for TEA construction (T389)	0							
		Check No. 42	304.99									
	43	Alamo Powerplant	305.73	(Includes 58,781 AF generation, 0 AF plant bypass, and 9,079 AF Tehachapi Bypass)	67,860							
			306.71	AVEK 305th Street West (T287)	0							
			308.05	AVEK 294th Street West (T267)	0							
19	44		309.70									
			311.84	LADWP Connection	0							
			313.50	AVEK 245th Street West (T269)	0							
	45	Check No. 44	314.81									
			314.93	AVEK 235th Street West (T270)	0							
	46		315.57	AVEK 225th Street West (T271)	0							
			319.74									
				Antelope Valley-East Kern WA Fairmont (T272)	390							
				Mojave Water Agency Fairmont (T272)	65							
				Check No. 46	323.84							
					Reach 19 Total:	455						
20A	47	Check No. 47	326.77									
	48		326.91	Antelope Valley-East Kern WA Willow Springs (T273)	34							
			329.65	Antelope Valley-East Kern WA 120th Street West	Re-moved							
		Check No. 48	330.82									
	49	Check No. 49	335.93									
	50		336.73	Antelope Valley-East Kern WA Quartz Hill (T274)	3,309							
			339.68	Antelope Valley-East Kern WA Rancho Vista (T275)	19							
			340.92	AVEK WA-Temp (T387)	0							
20B	50	Check No. 50	341.51									
	51		342.06	AVEK WA-Temp (T386)	0							
	51	Check No. 51	342.07									
	52		342.95	Antelope Valley-East Kern WA 30th Street West (T414)	0							
	52	Check No. 52	343.74									
	53		346.98	Palmdale WD (T276) Temp.	959							
			348.14	Antelope Valley-East Kern WA Acton Treatment Plant (T277)	11							
21	53	Check No. 53	348.17									
			349.52	Palmdale WD (T394)	0							
	54	Check No. 54	350.25									
	55	Check No. 55	352.70									
	56	Check No. 56	354.76									
	57		354.97	AVEK WA-Delivered through Littlerock Creek ID (T278)	0							
			354.97	Palmdale WD (T276)	0							
			354.97	Palmdale WD (T391)	0							
22A	58	Check No. 57	356.93									
			357.60	AVEK 95th Street East (T279)	17							
			357.72	AVEK 96th Street East (T280)	0							
			359.76	AVEK East Side Treatment Plant (T281)	292							

1/ Butte County Table A water transfer to Palmdale WD.

Table 31. Governor Edmund G. Brown California Aqueduct

Southern Field Division, Monthly Deliveries (East Branch, Continued)

(In acre-feet)

November 2009

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries									
	Beginning and Ending		No.			Table A	Rec.	Semitropic Bank Recovery	General Conveyance	Article 56C	Other				
	No.	Structure	Mile												
22B	58	Pearblossom Pumping Plant	360.61		64,220	209	838	3	89	2/ 27	1/ 95				
	59	Check No. 59	366.09												
	60		366.50	AVEK Big Rock Siphon (T368)	0										
		Check No. 60	373.94												
	61	Check No. 61	379.00												
	62	Check No. 62	384.26												
	63	Check No. 63	389.20	Mojave Water Agency White Road 24" & 42" (T282)	209										
	64	Check No. 64	395.10												
	65	Check No. 65	400.32												
	66		401.10	Mojave Water Agency Morongo 24" & 42" (T284)	838										
23		Check No. 66	403.41												
		Mojave Siphon	405.58	Las Flores Ranch Exchange	95										
24	67	Mojave Siphon Powerplant	405.65		63,929	3,759	4/ 8,616	3/ 3,000	5/ 100	89	2/ 27				
		Silverwood Lake	407.65	MWA CS DAM (T288)	0										
				California State Park Silverwood (T288)	3										
				Crestline-Lake Arrowhead WA State Project Water (T289) Non-Project Water (T289)	116 0										
		San Bernardino Intake Tunnel	407.70		63,387										
26A	68	Devil Canyon Powerplant	412.73		63,387										
		Devil Canyon Afterbay Control Structures	412.88	MWD-Rialto (T292)	0		38,732								
				MWD-Rialto (T293)	3,759										
				Desert Water Agency Transfer (T293)	0										
				Coachella Valley WD Transfer (T293)	3,000										
				MWD EBX-1 (T290)	0										
				MWD EBX-1 (T291)	0										
				East Branch Extension	8,716										
				Inland Feeded (T294)	38,732										
28G	69	Santa Ana Valley Pipeline	425.46			4,652	1,599	61	34	0	0				
28H			433.06	MWD-SC Box Springs (T295)	4,652										
28J			440.05	MWD-SC Perris Bypass Pipeline (T296)	1,599										
28J	69	Lake Perris	442.00	MWD-SC (T297)	147	61	34	0	0	0	0				
			443.44	MWD-SC 54" & 78" (T299)	61										
				Calif. State Park Lake Perris Parks & Rec. (T298)	34										
				MWD Total:	83,073										

1/ Project water delivered from Mojave Siphon in exchange for like amount of natural stream flow.

2/ Transfer of Table A from San Bernardino Valley WD to Crestline-Lake Arrowhead WA.

3/ Conveyance of non-project water Article 55 from Kern County WA to Coachella Valley WD.

4/ Includes 593 AF to San Gabriel Valley MWD, 7,506 AF to San Bernardino Valley MWD, and 517 AF to San Gorgonio Pass WA.

5/ Transfer of Table A from San Gorgonio Pass WA to San Bernardino Valley MWD.

Table 32. Water Quality At Selected SWP Locations

November 2009

Constituent	Units	Thermalito Afterbay At Outlet	North Bay Aqueduct Barker Slough Pumping Plant	Delta Mendota Canal At McCabe Rd.	California Aqueduct					
					Banks Pumping Plant	O'Neill Forebay Outlet (Check 13)	Kettleman City (Check 21)	Near Hwy 119 (Check 29)	Tehachapi Afterbay (Check 41)	Devil Canyon Headworks
Alkalinity	mg/l as CaCO ₃	48	84	67	70	75	70	63	61	70
Antimony	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NR	NR
Arsenic	mg/l	<0.001	0.002	0.002	0.002	0.002	0.002	0.004	0.004	0.004
Beryllium	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron	mg/l	<0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
Bromide	mg/l	<0.01	0.03	0.21	0.20	0.22	0.21	0.22	0.21	0.26
Calcium	mg/l	9	15	16	18	19	18	22	21	22
Chloride	mg/l as C	1.0	15.0	70.0	65.0	74.0	67.0	60.0	60.0	83.0
Chromium	mg/l as C	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0	0.0	0.0
Copper	mg/l	<0.001	0	0	0	0	0	0	0	0
Fluoride	mg/l	NR	<0.1	NR	<0.1	NR	NR	NR	NR	NR
Hardness	mg/l	42.000	86.000	88.000	94.000	98.000	92.000	86.000	90.000	99.000
Iron	mg/l	0.0	0.0	0.0	0.0	0.0	0.0	<0.005	<0.005	<0.005
Lead	mg/l as CaCO ₃	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Magnesium	mg/l	5.000	12.000	12.000	12.000	12.000	12.000	8.000	9.000	10.000
Manganese	mg/l	<0.005	0.021	<0.005	0.013	0.007	<0.005	<0.005	<0.005	<0.005
Nitrate + Nitrite	mg/l	0	1	1	1	1	1	1	1	1
Organic Carbon, Dissolved	mg/l	NR	2.800	2.500	2.700	2.400	2.400	1.600	1.600	1.700
Organic Carbon, Total	mg/l as N	NR	2.90	2.60	2.90	2.40	2.60	1.70	1.70	1.80
Phosphate-Ortho	mg/l as P	<0.01	0.06	0.04	0.03	0.05	0.05	NR	0.03	0.04
Phosphorus-Total	mg/l	<0.01	0.15	0.07	0.05	0.08	0.10	0.06	0.06	0.06
Selenium	mg/l	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001
Sodium	mg/l	4	18	47	45	53	47	51	50	62
Specific Conductance	µS/cm	102	250	420	408	468	426	413	407	497
Sulfate	mg/l	2	17	25	27	37	31	36	35	37
Total Dissolved Solids	mg/l	61	144	233	225	258	234	230	225	274
Turbidity	NTU	3	32	5	4	3	3	3	4	1
Zinc	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.038	<0.005

mg/l milligrams per liter

µg/l micrograms per liter

µS/cm microSiemens per centimeter

NR - Not Reported

NTU - nephelometric turbidity units

Table 33. Water Quality At Selected Delta Stations

November 2009

Date	Antioch Tides (feet above mean sea level)		Flow In CFS		Electrical Conductivity in millisiemens/cm										Cl in mg/l
			Net Delta Outflow Index		Rio Vista	Antioch	Chipps Island	Emmaton		Jersey Point		Clifton Court	Cache Slough	Delta Mendota Canal	
	Highest High Tide	Actual High Half Tide	Mean Daily	Monthly Average				md	md	md	14dm	md	14dm	md	md
1	5.79	3.77	4,451	4,451	3,717	3.22	8.71	1.10	0.86	0.89	0.89	0.42	0.87	0.42	129
2	6.02	3.89	4,625	4,538	3,700	3.51	9.17	1.36	0.87	0.91	0.88	0.42	0.86	0.43	136
3	6.24	4.04	4,571	4,549	3,750	3.83	9.76	1.66	0.91	0.98	0.88	0.42	0.82	0.43	138
4	6.80	4.51	4,293	4,485	3,614	4.72	12.00	2.52	1.01	1.25	0.90	0.42	0.79	0.46	132
5	6.54	4.37	3,716	4,331	3,242	4.45	11.55	2.28	1.09	1.13	0.92	0.42	0.84	0.47	129
6	6.44	4.32	4,559	4,369	5,474	4.45	11.50	2.20	1.19	1.15	0.94	0.46	0.83	0.47	125
7	6.07	4.23	3,979	4,313	4,598	4.23	11.20	1.82	1.25	1.07	0.95	0.47	0.84	0.47	132
8	5.64	3.94	4,695	4,361	3,852	3.65	9.98	1.44	1.31	0.92	0.95	0.48	0.86	0.49	139
9	5.18	3.75	4,279	4,352	3,736	3.30	9.41	1.27	1.33	0.82	0.95	0.48	0.87	0.51	134
10	5.00	3.53	4,660	4,383	3,948	2.91	9.09	1.14	1.38	0.75	0.94	0.48	0.88	0.51	133
11	5.34	3.64	4,839	4,424	3,939	3.01	9.29	1.16	1.44	0.77	0.94	0.47	0.87	0.50	133
12	5.68	3.75	4,583	4,438	5,312	3.29	10.02	1.19	1.48	0.81	0.94	0.44	0.85	0.49	130
13	5.75	3.73	4,256	4,424	4,834	3.48	10.14	1.28	1.52	0.87	0.94	0.46	0.86	0.50	30
14	5.82	3.71	3,302	4,343	3,746	3.35	9.77	1.28	1.55	0.85	0.94	0.46	0.86	0.51	120
15	5.76	3.62	4,323	4,342	3,805	3.32	9.45	1.30	1.57	0.85	0.94	0.49	0.85	0.52	130
16	5.81	3.62	4,450	4,349	3,616	3.43	9.58	1.44	1.57	0.84	0.93	0.48	0.83	0.53	129
17	6.14	3.97	4,669	4,368	3,655	3.92	10.71	1.90	1.59	0.97	0.93	0.47	0.80	0.53	72
18	5.92	3.89	4,166	4,357	3,327	3.84	10.49	1.60	1.52	0.91	0.91	0.49	0.81	0.52	131
19	5.77	3.80	5,458	4,414	5,343	3.50	9.71	1.60	1.47	0.88	0.89	0.53	0.81	0.59	129
20	6.34	4.23	5,881	4,488	6,649	4.70	11.67	2.30	1.48	1.23	0.90	0.51	0.77	0.56	127
21	5.43	4.01	5,980	4,559	6,455	3.72	9.67	1.13	1.43	0.90	0.88	0.55	0.89	0.56	131
22	5.18	3.86	7,754	4,704	7,988	3.15	8.36	0.96	1.40	0.88	0.88	0.51	0.84	0.59	134
23	4.71	3.60	7,297	4,817	7,857	2.90	7.97	0.74	1.36	0.77	0.88	0.52	0.78	0.58	126
24	4.76	3.45	6,659	4,894	7,977	2.84	7.72	0.72	1.33	0.73	0.88	0.51	0.78	0.59	124
25	5.00	3.43	4,054	4,860	5,835	3.20	8.84	0.85	1.31	0.75	0.87	0.50	0.80	0.58	126
26	5.30	3.55	3,499	4,808	4,283	3.77	9.60	1.21	1.31	0.82	0.88	0.46	0.81	0.58	109
27	5.78	3.81	3,587	4,762	4,023	4.79	11.87	1.65	1.33	1.05	0.89	0.41	0.82	0.57	111
28	6.00	3.81	3,489	4,717	3,779	4.13	11.06	0.82	1.30	1.06	0.90	0.39	0.90	0.54	145
29	5.84	3.70	4,555	4,711	4,911	3.90	10.91	1.22	1.30	1.12	0.92	0.42	0.83	0.66	121
30	6.06	3.86	3,750	4,679	5,708	4.80	11.98	2.35	1.36	1.37	0.96	0.42	0.78	0.63	122

Clifton Court Cl/(mg/l)=200X EC - 25

e = Estimated

N.R. = No Record.

N.C. = Not computed due to insufficient data.

f = Excess Delta conditions with fish concerns.

r = Excess delta conditions with export/inflow ratio concerns.

s = Balanced water conditions with storage withdrawals.

dm = Daily Mean

md = Mean Daily

Table 34. Pesticides, Herbicides, and Other Organic Substances Detected In the SWP

November 2009

Sampling Location	Sample Date 1/	Chemical Detected	Concentration µg/l 2/
North Bay Aqueduct At Barker Slough Pumping Plant	June 17, 2009	Metolachlor	0.10
California Aqueduct At Banks Pumping Plant	June 16, 2009	Metolachlor Simazine	0.20 0.02
O'Niell Forebay Outlet Check 13	June 17, 2009	Simazine	0.02
Delta Mendota Canal At McCabe Road	June 17, 2009	Metolachlor Simazine	0.20 0.02
California Aqueduct Near Kettleman City (Check 21)	June 16, 2009	Simazine	0.02
California Aqueduct At Near Highway 119 (Check 29)	June 17, 2009	Simazine	0.02
California Aqueduct at Tehachapi Afterbay (Check 41)	March 17, 2009	Diuron	1.65
California Aqueduct At Devil Canyon Headworks	June 17, 2009	Simazine	0.06

1/ Locations are normally sampled during March, June, and September. Monthly reports will include data for the month in which samples were most recently taken.

2/ Micrograms per liter.

Table 35. Oroville and Delta Field Divisions Energy Data

(in kWh)

November 2009

Date	Oroville Thermalito Complex		Barker Slough Pumping Plant	Cordelia Pumping Plant Load	Banks Pumping Plant		South Bay Pumping Plant Load	Del Valle Pumping Plant Load
	Generation	Load			Total Load	SWP Load		
1	3,639,328	0	25,618	19,947	1,905,696	1,905,696	415,228	536
2	3,525,071	0	30,699	23,549	532,952	532,952	382,878	519
3	3,557,609	0	33,652	22,868	509,768	509,768	357,190	486
4	3,475,516	11	32,312	23,238	510,888	510,888	357,967	598
5	3,506,602	11	27,886	22,583	495,256	495,256	377,206	686
6	3,551,493	121	27,098	21,680	19,968	19,968	408,655	645
7	4,722,531	0	25,750	20,363	517,072	517,072	400,525	622
8	4,951,133	0	22,270	17,951	515,744	515,744	399,026	686
9	4,936,613	0	25,228	19,863	518,216	518,216	361,966	759
10	4,703,897	0	28,741	21,413	517,680	517,680	384,016	726
11	4,375,206	0	29,418	22,392	516,888	516,888	377,564	660
12	4,258,562	0	30,577	23,420	519,688	519,688	381,605	649
13	4,249,102	0	25,143	20,654	624,816	624,816	338,611	846
14	4,257,176	0	25,286	19,699	626,288	626,288	273,655	873
15	4,266,295	0	23,295	19,319	581,872	581,872	198,251	856
16	4,264,920	0	20,921	19,852	695,616	695,616	124,410	855
17	4,271,333	319	24,640	21,718	627,816	627,816	14,699	844
18	4,273,775	0	27,735	26,692	627,984	627,984	2,647	838
19	4,316,356	0	27,297	24,541	629,072	629,072	2,722	850
20	4,630,879	143	25,974	34,288	628,096	628,096	2,742	861
21	4,805,988	0	21,936	30,155	628,480	628,480	2,687	850
22	4,846,039	22	21,421	31,279	618,968	618,968	2,666	850
23	4,467,045	0	23,416	32,850	604,008	604,008	2,710	848
24	3,942,642	0	24,539	33,016	1,091,392	1,091,392	2,667	852
25	6,422,647	0	24,101	33,077	1,909,424	1,909,424	6,031	830
26	1,126,829	121	27,605	31,602	1,910,816	1,910,816	2,507	832
27	2,110,603	484	30,723	33,136	1,649,224	1,649,224	2,527	836
28	2,027,553	0	29,441	33,657	1,644,456	1,644,456	2,513	828
29	1,923,416	11	30,393	36,974	1,959,600	1,959,600	2,511	831
30	5,196,180	0	27,268	37,645	1,763,880	1,763,880	1,416	836
Total	120,602,339	1,243	800,383	779,421	25,901,624	25,901,624	5,589,798	22,788

Table 36. San Luis Field Division Energy Data

(in kWh)

November 2009

Date	Dos Amigos Pumping Plant		Gianelli Pumping-Generating Plant			
	Total Load	SWP Load 1/	Total Generation	SWP Generation 1/	Total Load	SWP Load 1/
1	845,998	845,998	0	0	2,372,942	72,942
2	400,220	400,220	0	0	1,842,610	48,610
3	400,068	400,068	0	0	1,683,792	27,792
4	455,182	455,182	0	0	19,536	19,536
5	542,014	262,014	0	0	20,064	20,064
6	491,481	211,481	0	0	19,877	19,877
7	720,085	440,085	0	0	18,964	18,964
8	682,143	394,143	0	0	19,371	19,371
9	447,999	167,999	0	0	19,734	19,734
10	270,203	-9,797	0	0	19,844	19,844
11	547,950	267,950	0	0	19,283	19,283
12	461,273	181,273	0	0	583,440	583,440
13	524,000	244,000	0	0	1,144,649	776,649
14	387,321	107,321	0	0	388,597	20,597
15	611,856	323,856	0	0	1,141,657	37,657
16	528,234	248,234	0	0	387,607	111,607
17	443,373	163,373	0	0	524,788	524,788
18	204,672	-75,328	0	0	1,347,379	611,379
19	361,046	81,046	0	0	1,061,049	511,049
20	436,196	156,196	0	0	555,786	187,786
21	469,402	189,402	0	0	520,388	152,388
22	610,963	322,963	0	0	1,115,312	11,312
23	363,976	83,976	0	0	376,739	8,739
24	242,159	170,159	0	0	379,071	203,071
25	199,307	127,307	0	0	1,119,283	943,283
26	213,695	141,695	0	0	2,494,657	1,438,657
27	217,614	145,614	0	0	1,240,954	1,064,954
28	214,738	142,738	0	0	1,636,250	1,416,250
29	202,486	130,486	0	0	2,711,434	1,655,434
30	233,746	161,746	0	0	814,110	638,110
Total	12,729,400	6,881,400	0	0	25,599,167	11,203,167

1/ Negative values may appear in SWP columns and indicate a mismatch of scheduled CVP energy and actual pumping; adjustments to SWP water shares are made to balance the mismatch.

Table 37. San Joaquin Field Division Plant Energy Load Data

(in kWh)

November 2009

Date	Coastal Branch					California Aqueduct			
	Las Perillas	Badger Hill	Devil's Den	Bluestone	Polonio	Buena Vista	Teerink	Chrisman	Edmonston
1	1,152	2,843	18,127	17,725	20,092	1,681,183	1,934,419	4,334,462	16,095,645
2	541	780	3,461	2,025	1,561	841,559	1,031,450	2,254,945	8,493,579
3	0	0	2,084	1,962	1,552	876,961	957,487	2,117,093	7,787,502
4	0	0	2,066	1,900	1,542	919,846	1,068,311	2,357,377	8,815,365
5	0	0	2,139	1,959	1,525	964,560	1,067,583	2,378,112	8,824,491
6	0	0	2,129	1,927	1,470	959,294	1,055,513	2,369,246	8,921,475
7	0	0	2,158	1,991	1,487	1,566,809	1,806,652	4,019,730	15,052,122
8	0	0	2,174	1,984	1,512	1,539,671	1,770,780	3,963,168	14,687,568
9	0	0	2,195	1,942	1,518	942,907	1,097,455	2,411,266	8,986,518
10	0	0	2,140	1,982	1,509	915,088	1,073,348	2,413,510	8,933,679
11	0	0	2,163	1,920	1,510	1,059,488	1,205,655	2,671,548	9,941,886
12	0	0	2,193	2,000	1,507	997,490	1,202,343	2,692,360	9,915,102
13	0	0	2,141	1,918	1,505	1,005,297	1,189,870	2,629,462	9,912,213
14	0	0	2,188	1,997	1,498	1,257,980	1,449,461	3,252,843	12,214,665
15	0	0	2,185	1,987	1,493	1,453,532	1,777,753	4,017,442	15,147,243
16	0	0	2,067	1,939	2,330	1,052,551	1,217,800	2,689,412	9,953,604
17	0	0	2,545	2,917	2,569	996,313	1,179,732	2,663,837	9,722,727
18	636	0	2,082	2,018	1,417	801,322	974,820	2,191,838	8,248,932
19	1,002	722	2,160	1,813	1,372	1,043,225	1,212,170	2,727,120	10,169,361
20	1,018	1,242	2,038	1,776	1,705	1,053,018	1,217,951	2,722,698	10,064,007
21	17,253	36,356	6,502	4,325	3,732	1,156,432	1,406,045	3,185,963	12,097,674
22	3,992	8,846	34,016	32,124	33,177	1,339,081	1,615,617	3,660,360	13,685,355
23	3,532	7,691	1,903	1,821	2,469	1,008,124	1,166,149	2,607,891	9,571,419
24	7,521	20,455	61,518	57,871	60,777	752,246	930,101	2,103,266	8,073,054
25	7,270	17,263	52,660	50,389	52,126	599,467	769,728	1,733,072	6,378,183
26	6,182	16,132	44,544	41,469	44,931	661,532	794,426	1,799,347	6,657,174
27	6,661	16,063	39,656	36,866	39,618	641,112	778,154	1,779,602	6,641,379
28	6,355	15,613	45,902	42,649	45,714	657,960	794,005	1,791,185	6,812,208
29	7,257	16,360	44,368	41,043	43,772	643,026	773,584	1,725,064	6,322,401
30	2,393	6,129	27,941	25,616	28,479	590,420	753,092	1,711,952	6,290,109
Total	72,765	166,495	419,445	389,855	405,469	29,977,494	35,271,454	78,975,171	294,416,640

Table 38. Southern Field Division Energy Data

(in kWh)

November 2009

Date	West Branch			East Branch				East Branch Extension		
	Oso Pumping Plant Load	Warne Powerplant Generation	Castaic SWP Gen /1	Alamo Powerplant Generation	Pearblossom Pumping Plant Load	Devil Canyon Powerplant Generation	Mojave Siphon Powerplant Generation	Green spot Pumping Plant	Crafton Hills Pumping Plant	Cherry Valley Pumping Plant
1	700,488	693,359	1,824,000	326,929	2,676,642	3,257,762	308,140	51,334	57,455	563
2	432,978	661,554	2,016,000	191,438	1,169,923	2,609,341	139,350	46,518	50,424	754
3	423,845	662,227	2,016,000	174,120	1,214,593	2,574,007	137,728	57,425	63,327	3,890
4	465,168	663,784	2,016,000	201,496	1,410,090	3,067,906	153,084	60,884	67,695	3,330
5	458,898	663,982	2,016,000	197,455	1,408,942	3,146,611	153,180	60,951	67,457	612
6	491,959	663,951	2,016,000	208,972	1,375,253	3,082,795	162,516	60,547	67,384	442
7	667,356	662,883	2,016,000	265,025	2,086,155	3,082,636	270,208	59,802	67,352	383
8	760,849	660,586	2,016,000	312,020	2,352,896	2,989,722	259,698	59,744	67,424	382
9	430,115	660,851	2,016,000	209,568	1,433,930	3,278,016	158,018	64,315	67,492	3,576
10	432,829	662,537	2,016,000	215,727	1,447,786	3,185,702	178,332	68,311	67,556	3,372
11	466,005	664,924	2,016,000	240,767	1,632,352	3,161,667	177,655	68,206	67,545	779
12	468,653	662,164	1,848,000	279,984	1,615,951	3,136,896	181,364	56,205	54,550	490
13	470,155	662,778	1,932,000	247,601	1,667,507	3,026,067	198,211	52,131	50,269	388
14	610,319	665,410	2,016,000	286,967	1,761,529	3,148,387	226,706	57,067	63,025	382
15	751,873	659,753	2,016,000	309,742	2,333,264	2,976,873	301,316	58,193	67,129	388
16	480,872	661,099	2,016,000	228,406	1,626,226	3,101,201	185,328	58,993	67,388	390
17	477,924	663,107	2,016,000	260,020	1,674,698	3,021,599	201,197	59,581	67,420	3,298
18	392,560	662,647	2,016,000	237,169	1,396,273	3,407,916	159,458	61,046	61,042	2,951
19	489,422	665,901	2,016,000	254,385	1,365,602	2,860,491	119,378	63,865	50,325	380
20	510,103	665,080	2,016,000	254,766	1,580,901	3,017,513	175,788	56,455	38,898	389
21	628,214	664,870	2,016,000	276,393	1,858,714	2,969,609	215,489	51,963	34,789	384
22	686,116	660,122	2,016,000	305,696	2,154,305	2,854,503	256,248	52,061	34,790	385
23	363,104	663,738	2,016,000	240,571	1,641,080	2,969,714	200,204	52,128	34,787	385
24	477,520	662,094	2,016,000	195,187	1,065,357	1,763,169	130,393	53,257	34,818	393
25	499,897	662,175	2,016,000	117,304	685,509	891,615	54,164	53,874	45,597	407
26	539,812	663,773	2,016,000	80,786	423,764	801,923	45,881	14,028	10,108	375
27	540,155	663,209	2,016,000	93,086	420,207	867,900	45,162	5,590	541	385
28	538,484	661,679	2,016,000	85,327	416,102	835,143	45,194	21,234	20,801	380
29	534,915	663,925	2,016,000	90,918	547,569	781,186	45,652	21,925	19,213	389
30	503,371	661,437	2,016,000	123,363	458,582	817,829	50,518	49,307	34,652	386
Total	15,693,959	19,915,599	60,036,000	6,511,188	42,901,702	76,685,699	4,935,560	1,556,940	1,501,253	31,008

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations.